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Patent and Trademark Office

135

SEARCH REQUEST FORM

-C-

Requestor's Name: D. DINH

Serial Number: 08/660,460

Date: 10/4/96 Phone: 305-9655 Art Unit: 2317

Search Topic:

Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevant citations, authors keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevant claim(s).

Oct. 1993 F. D

article that cited this reference or any follow up article

"VIDEO SWITCHING: SYSTEMS and SERVICES"
C. Crawford, F. Milone, P. Zoppellaro
Digital Communication, 1988 International Zurich Seminar.

(C) I'm looking for reference that disclose conferencing system that has separate networks for data and audio/video. (similar to that of Crawford article) Specifically, system that has digital network for data and network for transmitting NTSC or PAL video signal.

SEARCHER NOTES
Part A: Citations for this article and "follow-up articles" (by same authors).
Part B: Cited reference search for articles in Part A.
Part C. Subject Search.

NTSC National Television System Committee
PAL: Phase Alternation Line.
Alternating [By]

STAFF USE ONLY

Date completed:
Searcher: Robert F. Jack 305-7795
Terminal time: 1
Elapsed time:
CPU time: ~~27 min pre + post~~
Total time: ~~260 min~~
Number of Searches: 4 Part A: 36 Part B: 30
Number of Databases: part C: 55 databases

Search Site
- STIC
- CM-1
- Pre-S
- ✓ EIC

Type of Search
- N.A. Sequence
- A.A. Sequence
- Structure
- ✓ Bibliographic

Vendors
- IG Suite
- STN
- ✓ Dialog 10/29/96 2.10
- APS 10/29/96: .75 2.577
- Geninfo
- SDC
- DARC/Questel
- Other

in 10/29/96 1:30pm - 4:00pm 11:35 1:40-6:30

PTO-1590 (9-95)

USCOMM-DC 90-7

File 2:INSPEC 1969-1996/Oct W3
(c) 1996 Institution of Electrical Engineers
File 8:Ei Compendex(R) 1970-1996/Nov W1
(c) 1996 Engineering Info. Inc.
File 14:Mechanical Engineering Abs 1973-1996/Nov
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File 109:Nuclear Sci. Abs. 1948-1976
(c)format only 1995 Knight-Ridder Info
File 108:Aerospace Database 1962-1996/Oct
(c) 1996 AIAA
File 144:Pascal 1973-1996/Sep
(c) 1996 INIST/CNRS
File 94:JICST-EPlus 1985-1996/Sep W5
(c)1996 Japan Science and Tech Corp(JST)
File 275:IAC(SM) Computer Database(TM) 1983-1996/Oct 25
(c) 1996 Info Access Co
File 148:IAC Trade & Industry Database 1976-1996/Oct 25
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File 47:Magazine Database(TM) 1959-1996/Oct 25
(c) 1996 INFORMATION ACCESS CO.
File 674:Computer News Fulltext 1989-1996/Oct W2

(c) 1996 IDG Communications
File 583:IAC Globalbase(TM) 1986-1996/Week 3
(c) 1996 Information Access Co.
File 262:Canadian Bus. & Current Affairs 1982-1996/Sep
(c) 1996 Micromedia Ltd.
File 799:Textline Curr.Glob.News 1995-1996/Oct 25
(c) 1996 Reuters Info.Svcs.
File 772:Textline Global News 1990-1994
(c) 1996 Reuters Info.Svcs.
File 771:Textline Global News 1980-1989
(c) 1994 Reuters Info.Svcs.

Set	Items	Description
S1	1759	AU=CRAWFORD C? OR AU=CRAWFORD, C?
S2	56	AU=MILONE F? OR AU=MILONE, F?
S3	4	AU=ZOPPELLARO D? OR AU=ZOPPELLARO, D?
S4	2	S1 AND S2 AND S3
S5	2	S4 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-25)
S6	1	RD S5 (unique items)

6/5/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

03219206 INSPEC Abstract Number: B88059840, C88052166
Title: Videomatic switching: systems and services
Author(s): Crawford, C.; Milone, F.; Zoppellaro, D.
Author Affiliation: Italtel SIT, Milan, Italy
Conference Title: 1988 International Zurich Seminar on Digital Communications: Mapping New Applications onto New Technologies (Cat. No.88TH0202-2) p.37-43
Editor(s): Plattner, B.; Gunzburger, P.
Publisher: IEEE, Zurich, Switzerland
Publication Date: 1988 Country of Publication: Switzerland 266 pp.
ISBN: 3 908265 01 0
Conference Sponsor: IEEE; Assoc. Elettrotecnica Elettronica Italiana; Convention Nat. Soc. Electr. Eng. Western Eur.; et al
Conference Date: 8-10 March 1988 Conference Location: Zurich, Switzerland
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: An overview is provided of the trends in videomatic services and systems now coming into being with the advent of ISDN (integrated-services digital networks) and the prospect of broadband ISDN. Service aspects are discussed, including videoconferencing, videocoding, and videotelephony, and the LVX (local video exchange) system, an integrated video-voice-data local area network, is described from implementation and technical standpoints. (6 Refs)
Descriptors: broadband networks; encoding; ISDN; local area networks; teleconferencing; videotelephony
Identifiers: videomatic switching; videomatic systems; videomatic services; integrated-services digital networks; broadband ISDN; local video exchange; integrated video-voice-data local area network
Class Codes: B6210D (Telephony); B6210L (Computer communications); B6210M (ISDN); B6210P (Teleconferencing); C5620L (Local area networks); C7410F (Communications)

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File 439:Arts&Humanities Search(R) 1980-1996/Oct W3
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(c)format only 1996 Knight-Ridder Info
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(c)format only 1995 Knight-Ridder Info
File 108:Aerospace Database 1962-1996/Oct
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S3	4	AU=ZOPPELLARO D? OR AU=ZOPPELLARO, D?
S4	2	S1 AND S2 AND S3
S5	2	S4 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-25)
S6	1	RD S5 (unique items)
S7	4	(S1 AND (S2 OR S3)) OR (S2 AND S3)
S8	3	S7 NOT (S6 OR PY=1994:1996 OR PY=930930:961025 OR PD=93093-0:961025)
S9	2	RD S8 (unique items)

9/5/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

03371199 INSPEC Abstract Number: B89033879, C89033158
Title: LVX: a videomatic network node
Author(s): Milone, F.; Zoppellaro, D.
Author Affiliation: Italtel SIT, Milan, Italy
Conference Title: GLOBECOM '88. IEEE Global Telecommunications Conference and Exhibition - Communications for the Information Age. Conference Record (IEEE Cat. No.88CH2535-3) p.760-6 vol.2
Publisher: IEEE, New York, NY, USA
Publication Date: 1988 Country of Publication: USA 3 vol. xxix+1817 pp.
U.S. Copyright Clearance Center Code: CH2535-3/88/0000-0760$01.00
Conference Sponsor: IEEE
Conference Date: 28 Nov.-1 Dec. 1988 Conference Location: Hollywood, FL, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: Gives an overview of the trends in videomatic services and systems resulting from the advent of ISDN (integrated services digital network) and the promise of broadband ISDN. Service aspects are discussed and the LVX (local video exchange) system, an integrated video-voice-data local area network, is described from implementation and technical standpoints. (6 Refs)
Descriptors: broadband networks; ISDN; local area networks; video signals ; visual communication
Identifiers: LVX; videomatic network node; videomatic services; ISDN; broadband ISDN; local video exchange; integrated video-voice-data local area network
Class Codes: B6430 (Television equipment, systems and applications); B6210M (ISDN); B6210L (Computer communications); C5620L (Local area networks)

9/5/2 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02677117 E.I. Monthly No: EIM8811-057400
Title: VIDEOMATIC SWITCHING: SYSTEMS AND SERVICES.
Author: Crawford, C.; Milone, F.; Zoppellaro, D.
Corporate Source: Italtel SIT, Milan, Italy
Conference Title: 1988 International Zurich Seminar on Digital Communications: Mapping New Applications onto New Technologies.
Conference Location: Zurich, Switz Conference Date: 19880308
Sponsor: IEEE, Switzerland Chapter on Digital Communication Systems, Swiz ; Assoc Elettrotechnica ed Elettronica Italiana; Convention of National Soc of Electrical Engineers of Western Europe; Gesellschaft fuer Informatik; IEEE, Computer Soc; et al
E.I. Conference No.: 11604
Source: International Zurich Seminar on Digital Communications 1988. Publ by IEEE, Zurich, Switz. Available from IEEE Service Cent (cat n 88TH0202-2), Piscataway, NJ, USA p 37-43
Publication Year: 1988
CODEN: PIZCDH
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8811
Abstract: An overview is provided of the trends in videomatic services and systems now coming into being with the advent of ISDN (integrated-services digital networks) and the prospect of broadband ISDN. Service aspects are discussed. The LVX (local video exchange) system, an integrated video-voice-data local area network, is described from implementation and technical standpoints. 6 refs.
Descriptors: *DIGITAL COMMUNICATION SYSTEMS; COMPUTER NETWORKS--Local Networks; TELEPHONE EQUIPMENT--Video Telephone; TELECONFERENCING
Identifiers: VIDEOMATIC SWITCHING; BROADBAND ISDN; LVX (LOCAL VIDEO EXCHANGE); INTEGRATED VIDEO/VOICE/DATA LAN; VIDEOTELEPHONY SIGNALING
Classification Codes:
718 (Telephone & Line Communications); 723 (Computer Software)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

File 351:DERWENT WPI 1981-1996/UD=9642;UA=9638;UM=9631
(c)1996 Derwent Info Ltd
File 350:Derwent World Pat. 1963-1980/UD=9640
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File 348:EUROPEAN PATENTS 1978-1996/OCT W4
(c) 1996 European Patent Office
File 347:JAPIO OCT 1976-1996/May.
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File 344:Chinese Patents ABS Apr 1985-1996/Oct
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Set	Items	Description
S1	862	(TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-IDEOTELECONFERENC?
S2	0	S1 AND (VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHANG-?)
S3	0	S2 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S4	4	S1 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))

4/5/1 (Item 1 from file: 351)
DIALOG(R)File 351:DERWENT WPI

004640666 WPI Acc No: 86-144009/22
Related WPI Accession(s): 83-796708
XRPX Acc No: N86-106564
High resolution television without vertical aliasing modulates vertical deflection of unit in phase with camera modulation while displaying video signal
Patent Assignee: (HIGH-) HIGH RESOLUTION TEL
Author (Inventor): SONGER J D
Number of Patents: 001
Patent Family:

CC Number	Kind	Date	Week	
US 4589012	A	860513	8622	(Basic)

Priority Data (CC No Date): US 515220 (830719); US 364884 (820402)
Abstract (Basic): US 4589012

The display unit is provided with its own modulating oscillator operating at the same stable frequency as the modulating frequency of the camera. The unit phase synchronised by information *****transmitted***** by the camera. In the case of *****NTSC***** colour television, the vertical deflection modulating oscillator of the camera is the colour modulating oscillator, and the vertical deflection modulating oscillator of the receiver is the oscillator used for colour demodulation phase synchronised by colour bursts gated during blanking periods of each frame.

A frequency doubler is employed for modulation of vertical deflection in both the camera and the receiver in order that, for a line scanning rate of 15,734 lines per second, there will be 455 modulation cycles for each line.

USE - PAL, SECAM, video display, computer nal, *****teleconference*****, phone vision. @(8pp Dwg.No.1/4)@

File Segment: EPI
Derwent Class: W02; W04; R57;
Int Pat Class: H04N-007/00
Manual Codes (EPI/S-X): W02-F02; W02-F09; W04-M01A; W04-M09

4/5/2 (Item 2 from file: 351)
DIALOG(R)File 351:DERWENT WPI

004020697 WPI Acc No: 84-166239/27
XRPX Acc No: N84-123733
Colour video signal discrete picture elements bi-level coding appts. compares each multi-level or continuous pixel in frame with threshold, obtained by averaging luminance components of nearby pixels
Patent Assignee: (NELE) NORTHERN TELECOM LTD
Author (Inventor): SABRI M S
Number of Patents: 006
Patent Family:

CC	Number	Kind	Date	Week	
EP	112499	A	840704	8427	(Basic)
JP	59110291	A	840626	8431	
US	4528584	A	850709	8530	
CA	1192997	A	850903	8540	
EP	112499	B	871111	8745	
DE	3374512	G	871217	8751	

Priority Data (CC No Date): CA 416677 (821130); US 446608 (821203)
Applications (CC,No,Date): EP 83111708 (831123); JP 83222290 (831128)
Language: English
EP and/or WO Cited Patents: No.SR.Pub; A3 ...8521; GB 2004435; DE 3202155; EP 63990
Designated States (Regional): DE; FR; GB; NL; SE
Abstract (Basic): EP 112499

The appts. has an input terminal (10) for a composite colour video signal which is to be encoded. The input signal is led to a summer (14), a bandpass filter and a comparator. The summer computes from the input picture elements a constrained weighted average. It is adapted to sum nine preceding picture elements. The weighted average is proportional to the luminance component of the input signal.

The bandpass filter is a one- or two-dimensional digital filter passing a chrominance signal of the input signal. The luminance and chrominance signals are used to derive a threshold signal. The picture element to the encoder is then compared with the threshold value to provide an output signal having either one of two states depending upon the comparison result. The appts. is used for video *****teleconference***** or *****NTSC***** *****broadcast***** TV signals, and aids in reducing storage capacity or *****transmission***** channel bandwidth. @(17pp Dwg.No.1/2)@

Abstract (US): 8530 US 4528584

The appts. includes a device for deriving from several picture elements including at least one picture element other than the piecture element to be encoded a signal (phi ij), proportional to the luminance component. A further device derives a second signal (C ij) proportional to the chrominance component. A threshold signal (B ij) is computed from the first two signals.

A comparator compares the picture element to be encoded with the threshold value and provides an output signal Yij, having either one of two states in dependence upon whether or not the picture element exceeds the threshold value.

ADVANTAGE - Obviates the need to add noise (or dither signal) to signal with picture degrading effects. @(7pp)@

Abstract (EP): 8745 EP 112499

Video signal processing apparatus comprising means for bilevel coding discrete picture ele ments of a colour video signal having a

luminance component and a chrominance component, including:- means (14) for deriving from a plurality of picture elements including at least one picture element other tian the picture element to be encoded a first signal, (pii ij) proportional to said luminance component, means (18,54) for deriving from the colour video signal a second signal proportional to said chrominance component; means (68) for computing from said first and second signals a threshold signal (Bij) and a comparator (22) for comparing siad picture element to be encoded with said threshold value and providing an output signal Yij having either one of two states in dependence upon whether or not said picture element exceeds said threshold value. @(12pp)@

File Segment: EPI
Derwent Class: W02; W01; W04; R57;
Int Pat Class: H04N-009/53; H04N-007/13
Manual Codes (EPI/S-X): W01-C05B; W02-F02; W02-F05; W02-F09; W04-P

4/5/3 (Item 3 from file: 351)
DIALOG(R)File 351:DERWENT WPI
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003762601 WPI Acc No: 83-758812/36
XRPX Acc No: N83-159570
Digital *****transmission***** of *****NTSC***** video signal by inverting chrominance band components in alternate frames and inverting other frames in receiver after decoding

Patent Assignee: (NELE) NORTHERN TELECOM LTD
Author (Inventor): LEE P F
Number of Patents: 002
Patent Family:

CC	Number	Kind	Date	Week	
US	4400718	A	830823	8336	(Basic)
CA	1161158	A	840124	8409	

Priority Data (CC No Date): US 270591 (810604); CA 378882 (810602)
Abstract (Basic): An analog NTSC colour video signals is converted into a digital video signal and all of the signal components in the chrominance spectral band in alternate television frames are inverted. The resultant signal a transmitted via low-speed digital signal transmission channel using interframe difference coding. At a receiver, the received digital signal is converted into an analog video signal and all of the signal components in the chrominance spectral band in the other alternate television frames are inverted. The resultant signal having inverted chrominance, is reproduced on a conventional *****NTSC***** color television receiver. Bandpass and comb filtering pref. on the digital signals, are used at the *****transmitter***** and at the receiver to separate the luminance and chrominance signal components to enable inversion of the chrominance components. The method is suitable for *****teleconference***** a video telephone purposes. (8pp Dwg.No.2/6)

File Segment: EPI
Derwent Class: W02; W01; W03; R57;
Int Pat Class: H04N-009/32
Manual Codes (EPI/S-X): W01-C05B; W02-F02; W03-A05

4/5/4 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00100568

Process and apparatus for bilevel coding of colour video signals.

PATENT ASSIGNEE:
NORTHERN TELECOM LIMITED, (217320), 1600 Dorchester Boulevard West, Montreal Quebec H3H 1R1, (CA), (applicant designated states: DE;FR;GB;NL;SE)
AUTHOR (Inventor):
Sabri, Mohammed Shaker, 141 Franklin Rd., Beaconsfield Quebec, H9W 5P8, (CA)
LEGAL REPRESENTATIVE:
Crawford, Andrew Birkby , A.A. THORNTON & CO. Northumberland House 303-306 High Holborn, London WC1V 7LE, (GB)

PATENT (CC, No, Kind, Date): EP 112499 A2 840704 (Basic)
EP 112499 A3 850522
EP 112499 B1 871111
APPLICATION (CC, No, Date): EP 83111708 831123;
PRIORITY DATA (CC, No, Date): CA 416677 821130
LANGUAGE (Publication,Procedural,Application): English; English; English
DESIGNATED STATES: DE; FR; GB; NL; SE
INTL PAT CLASS: H04N-009/64;
CITED PATENTS (EP A): GB 2004435 A; DE 3202155 A; EP 63990 A
WORD COUNT: 135

ABSTRACT: EP 112499 A2
Process and apparatus for bilevel coding of colour video signals.
Bilevel coding of colour video signs, for example video *****teleconference***** or *****NTSC***** *****broadcast***** television signals, is used to reduce the required storage capacity or *****transmission***** channel bandwidth. Each multi-level or continuous tone picture element in a frame is compared to a threshold and assigned one of two values depending upon whether or not it exceeds the threshold value. The threshold is produced by averaging tne luminance components of neighbouring picture elements and constraining the average by a signal derived from the chrominance of the original video signal. A significant feature is that the use of the chrominance signal in this way obviates the need, common to known monochrome systems, of adding noise (or dither signal) to the signal with concomitant picture degrading artifacts.

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	840704 A2	Published application (A1withSR;A2withoutSR)
Search Report:	850522 A3	Separate publication of the European or International search report
Examination:	850904 A2	Date of filing of request for examination: 850624
Change:	860326 A2	Representative (change)
Examination:	860827 A2	Date of despatch of first examination report: 860710
Grant:	871111 B1	Granted patent
Oppn None:	881026 B1	No opposition filed

File 351:DERWENT WPI 1981-1996/UD=9642;UA=9638;UM=9631
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File 350:Derwent World Pat. 1963-1980/UD=9640
(c) 1996 Derwent Info Ltd
File 348:EUROPEAN PATENTS 1978-1996/OCT W4
(c) 1996 European Patent Office
File 347:JAPIO OCT 1976-1996/May.
(c) JPO & JAPIO
File 344:Chinese Patents ABS Apr 1985-1996/Oct
(c) 1996 European Patent Office

Set	Items	Description
S1	862	(TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-IDEOTELECONFERENC?
S2	0	S1 AND (VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHANG-?)
S3	0	S2 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S4	4	S1 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S5	13	S1 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR CHANNEL?)
S6	13	S5 NOT S4

6/5/1 (Item 1 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010836473 WPI Acc No: 96-333426/33
Related WPI Accession(s): 95-035783
XRPX Acc No: N96-281016 *Image available*
Two=way *****video***** *****conferencing***** in LAN environment - uses signals transmitted on one LAN to control transmission of TV signals on another LAN such that they are transmitted simultaneously, each assigned to *****separate***** frequency *****channel*****
Patent Assignee: (TARG-) TARGET TECHNOLOGIES INC
Author (Inventor): FLOHR D P; ROSS S
Number of Patents: 001
Number of Countries: 001
Patent Family:

CC	Number	Kind	Date	Week	
US	5534914	A	960709	9633	(Basic)

Priority Data (CC No Date): US 199377 (940218); US 72201 (930603); US 310732 (940922)
Filing Details: US5534914 Div ex US 5374952
Abstract (Basic): US 5534914 A

The *****video***** *****conferencing***** network includes a number of computer stations. The network has a broadband local area network (B-LAN) directly connected to the input and output ports of the stations, for transmitting and receiving television signals between selected stations. Each television signal is transmitted at a selected frequency channel.

The B-LAN has a two-way transmission line with a number of connection points, each directly coupled to one of the input and output ports, and extending from a first station to a remote, second connection point coupled to the input and output port of a second station. The transmission line is capable of two-way transmission

between any two connection points, including the two connection points, via a first frequency channel for transmission in one direction and a second frequency channel for transmission in the opposite direction.

USE/ADVANTAGE - Does not require dedicated computer for controlling interconnection of video workstations and/or selection of transmission channels on multichannel cable. Dwg.1/26

File Segment: EPI
Derwent Class: W01; W02;
Int Pat Class: H04M-011/00; H04N-007/14
Manual Codes (EPI/S-X): W01-A06B5A; W01-A06E1; W01-A06G3; W02-F03A9; W02-F08A1

6/5/2 (Item 2 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010792382 WPI Acc No: 96-289335/30
Related WPI Accession(s): 92-301866
XRPX Acc No: N96-242824 *Image available*

Multi-location television conference system - has conference terminals with different line speeds connected to communications network, conference devices connected to network for holding conferences, and management device for allocating available lines and devices; TV *****TELECONFERENCE*****

Patent Assignee: (MITQ) MITSUBISHI DENKI KK
Author (Inventor): NAKATSUKA K
Number of Patents: 002
Number of Countries: 003
Patent Family:

CC	Number	Kind	Date	Week	
EP	719044	A2	960626	9630	(Basic)
EP	719044	A3	960717	9636	

Priority Data (CC No Date): JP 91106503 (910412); JP 9165255 (910307)
Applications (CC,No,Date): EP 92103896 (920306); EP 96101535 (920306); EP 92103896 (920306); EP 96101535 (920306)
Language: English
EP and/or WO Cited Patents: No-SR.Pub; 5.Jnl.Ref; JP 1258575 Y; JP 3216051 A
Designated States (Regional): DE; FR; GB
Abstract (Basic): EP 719044 A

The multi-location television conference system has a number of conference devices (105) that are connected to a *****network*****, e.g. ISDN (104). At *****multiple***** remote sites, conference terminals (106) are available, connected to the network. An operational management unit (108) is linked to the conferencing devices and controls their allocation of time and lines.

The remote terminals may have different line speed capabilities and a conference can only occur at one line speed. When a reservation for a conference is made, the remote sites are checked to determine line speeds and the operational unit searches the conference devices for a suitable choice of lines.

ADVANTAGE - Allows automatic starting and ending of conferences in accordance with previously collected reserved conference information. Allows several multi-location conferences to be held simultaneously. Improves utility of conference devices and communication lines. Dwg.14/22

File Segment: EPI

Derwent Class: W02;
Int Pat Class: H04N-007/15
Manual Codes (EPI/S-X): W02-F08A1

6/5/3 (Item 3 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010711967 WPI Acc No: 96-208922/21
Related WPI Accession(s): 90-107570; 90-320531; 92-373267; 93-387018
XRPX Acc No: N96-174894 *Image available*
Television program insertion method - storing main and secondary programs using several channels to which signals are allocated after selection, for requesting channel compression before transmission and multiplexing operation
Patent Assignee: (KASS/) KASSATLY L S A
Author (Inventor): KASSATLY L S A
Number of Patents: 001
Number of Countries: 001
Patent Family:

CC	Number	Kind	Date	Week	
US	5508733	A	960416	9621	(Basic)

Priority Data (CC No Date): US 17030 (930212); US 258722 (881017); US 308826 (890210); US 457403 (891218); WO 89US5713 (891219); US 573539 (900827); US 826372 (920127)
Filing Details: US5508733 CIP of US 4903126; US5508733 CIP of US 4975771; US5508733 CIP of US 5157491
Abstract (Basic): US 5508733 A
The insertion method is used for selectively inserting one or more commercial or secondary programs in one or more main television programs in response to requests from a selector unit (240). The method involves storing the commercial or secondary programs and the main television programs, using at least two *****separate***** *****channels*****. The *****channels***** are then selected. Signals are generated to identify the selected channels and the insertion positions of each secondary programs relative to each main programs.
The identifying signals are fed back to a transmitter. The transmitter compress the selected channels in response to the identifying signals, and transmits the compressed selected channels. The transmitted compressed selected channels are stored for a predetermined period of time and multiplexed in a predetermined order. If required, the stored selected channels are then decompressed.
USE/ADVANTAGE - Increases channel availability and renders channel allocation process more efficient in video *****teleconferencing*****. Can be implemented with new or existing system. Improves S/N ratio in video broadcasting systems. Allows user to size LCD monitor according to needs. Allows implementation of efficient paperless network. Achieves greater control over penetration and resolution of ultrasound signals in medical application. Dwg.8/52
File Segment: EPI
Derwent Class: W02; W04;
Int Pat Class: H04N-007/015; H04N-007/14; H04N-007/26
Manual Codes (EPI/S-X): W02-F05A3C; W02-F07; W02-F08; W04-P01A

6/5/4 (Item 4 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010674924 WPI Acc No: 96-171878/17
XRPX Acc No: N96-144373 *Image available*
Stand alone peripheral *****video***** *****conferencing***** system - allows communication with analogue or digital communications *****channel***** and *****separate***** host computer system
Patent Assignee: (RSIS-) RSI SYSTEMS INC
Author (Inventor): CLAPP D; MULDER D
Number of Patents: 002
Number of Countries: 064
Patent Family:

CC	Number	Kind	Date	Week	
WO	9608110	A1	960314	9617	(Basic)
AU	9535484	A	960327	9627	

Priority Data (CC No Date): US 302108 (940907)
Applications (CC,No,Date): AU 9535484 (950907); WO 95US11390 (950907)
Language: English
EP and/or WO Cited Patents: 02Jnl.Ref; US 5204768; US 5374952
Designated States
(National): AM; AT; AU; BB; BG; BR; BY; CA; CH; CN; CZ; DE; DK; EE; ES; FI ; GB; GE; HU; IS; JP; KE; KG; KP; KR; KZ; LK; LR; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; TJ; TM; TT; UA; UG; UZ; VN
(Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; KE; LU; MC; MW; NL ; OA; PT; SD; SE; SZ; UG
Filing Details: AU9535484 Based on WO 9608110
Abstract (Basic): WO 9608110 A
The system for communicating with a communication *****channel***** and a *****separate***** host processor has a peripheral housing is separate from the computer system housing. An audio/visual communication system is integral to the peripheral housing. The communication system has a source receiver which receives a source audio signal and a source video signal at a local conferencing site. A local transmitter transmits the source audio and video signal over the communication channel to a remote conferencing site.
A local receiver receives a remote audio and video signals transmitted over the communication channel from the remote conferencing site. An output connector communicates the remote video signal between the local receiver and the output connector. The separate host processor, when coupled to the output connector, receives the remote video signal for displaying a corresp. video image on the display.
USE/ADVANTAGE - Minimises complexity of installing, configuring and separating system. Easy to transport. Full colour motion system. Conforms with internationally recognised standards. Dwg.5/15
File Segment: EPI
Derwent Class: W01; W02;
Int Pat Class: H04H-001/08; H04H-002/18; H04M-003/56; H04N-007/15
Manual Codes (EPI/S-X): W01-C02B1; W01-C05B1E; W02-F08A1; W02-F08B1

6/5/5 (Item 5 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010503033 WPI Acc No: 95-404355/51
XRPX Acc No: N95-292787 *Image available*
Point-to-multipoint cellular transmission system having relatively low power transmitter stations - has two or more cells, each having transmitter with own directional antenna and number of receivers also

with directional antennas, with transmitters being arranged along same geographic axis; MICROWAVE
Patent Assignee: (PHIG) PHILIPS ELECTRONICS NV; (PHIG) PHILIPS NORDEN AB
Author (Inventor): CLARKE I M U; KOOL L; CLARKE I; CLARKE I M
Number of Patents: 004
Number of Countries: 019
Patent Family:

CC	Number	Kind	Date	Week	
WO	9531070	A2	951116	9551	(Basic)
AU	9522229	A	951129	9609	
EP	707773	A1	960424	9621	
WO	9531070	A3	951221	9622	

Priority Data (CC No Date): EP 94201249 (940506)
Applications (CC,No,Date): WO 95IB313 (950503); WO 95IB313 (950503); AU 9522229 (950503); EP 95915297 (950503); WO 95IB313 (950503)
Language: English
EP and/or WO Cited Patents: No-SR.Pub; 1.Jnl.Ref; EP 282347 Y; EP 429200 X; US 4249181 Y; WO 8707109 Y; WO 9222148 A
Designated States
(National): AU; CA; JP
(Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE
Filing Details: AU9522229 Based on WO 9531070; EP0707773 Based on WO 9531070
Abstract (Basic): WO 9531070 A

The point-to-multipoint cellular transmission system has at least two cells (C1,C2,..), each having a relatively low-power transmitter (T1,T2,..) for output of at least one television signal within the cell. Each cell has a number of receiver units [(R1,R2, R3,..) (R4,R5,..) ..], and each receiver has a directional antenna (RAi) for picking up a transmission signal.

Each transmitter is located at the periphery of its cell, and has a directional antenna (TAi), and the transmission antennas generally transmit along the main geographical axis of the system.

USE/ADVANTAGE - E.g. for public and private use, *****video***** *****conferencing***** telephony etc. *****Channels***** can be maintained totally *****separate***** from each other by sending each program from separate transmitter. Dwg.1/10

File Segment: EPI
Derwent Class: W02;
Int Pat Class: H04B-007/15; H04H-003/00; H04N-007/08; H04N-007/10; H04N-007/20
Manual Codes (EPI/S-X): W02-C03C1A; W02-F03A9; W02-F07; W02-F08

6/5/6 (Item 6 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010224105 WPI Acc No: 95-125360/17
XRPX Acc No: N95-099199 *Image available*
*****Teleconference***** system separating real=time and async. networks - couples distributed video mosaic generator to AV path for combining portion of mosaic image with captured image of third of participants
Patent Assignee: (VICO-) VICOR INC
Author (Inventor): BURNS E R; BUTNETT G J; LANTZ K A; LAUWERS J C; LUDWIG L F; BURNETT G J
Number of Patents: 008
Number of Countries: 058

Patent Family:

CC Number	Kind	Date	Week	
GB 2282506	A	950405	9517	(Basic)
WO 9510157	A1	950413	9520	
WO 9510158	A2	950413	9520	
AU 9471988	A	950501	9532	
AU 9479638	A	950501	9532	
WO 9510158	A3	950526	9616	
EP 721725	A1	960717	9633	
EP 721726	A1	960717	9633	

Priority Data (CC No Date): US 131523 (931001)
Applications (CC,No,Date): EP 94921163 (940316); WO 94US2961 (940316); GB 9410665 (940527); WO 94US2961 (940316); WO 94US11193 (941003); AU 9471988 (940316); AU 9479638 (941003); WO 94US11193 (941003); EP 94930561 (941003); WO 94US11193 (941003)
Language: English
EP and/or WO Cited Patents: 4.Jnl.Ref; DE 3507152; EP 354370; EP 497022; 5.Jnl.Ref; EP 190060 A; EP 523626 A; EP 561381 A
Designated States
(National): AT; AU; BB; BG; BR; BY; CA; CH; CN; CZ; DE; DK; ES; FI; GB; HU ; JP; KP; KR; KZ; LK; LU; LV; MG; MN; MW; NL; NO; NZ; PL; PT; RO; RU; SD; SE; SK; UA; US; UZ; VN; AM; GE; KE; KG; LT; MD; SI; TJ; TT
(Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT ; SE; OA; KE; MW; SD; SZ
Filing Details: EP0721725 Based on WO 9510157; AU9471988 Based on WO 9510157; AU9479638 Based on WO 9510158; EP0721726 Based on WO 9510158
Abstract (Basic): GB 2282506 A

The real-time network is used for audio and video. The async. network is used for control signals and textual, graphical and other data. An AV path (13) carries signals among the work-stations. A video mosaic generator combines images.

Geographically dispersed LANs (10) interconnected by a WAN (15) can reduce demands made on the latter by employing multi-hopping, including avoidance of unnecessary decompression of data at intermediate hops, as well as video mosaicing and cut-and-paste facilities.

USE/ADVANTAGE - Closely approximates experience of face-to-face collaboration. System architecture readily scalable to largest enterprise network environments. Accommodates differing levels of collaborative capabilities available to individual users and permits high quality audio and video capabilities to be readily super imposed onto existing personal computers and work-stations.

Dwg.1/42
File Segment: EPI
Derwent Class: T01; W02;
Int Pat Class: H04N-007/15
Manual Codes (EPI/S-X): T01-H07C; T01-J10C; W02-F08A1

6/5/7 (Item 7 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010134532 WPI Acc No: 95-035783/05
Related WPI Accession(s): 96-333426
XRPX Acc No: N95-028267 *Image available*
*****Video*****-*****conferencing***** network for digital computer work-stations connected via LAN - has signalling A-LAN connected to a

first port of work-stations for data signals, and broadband B-LAN connected to a second port for handling television signals from selected frequency channel

Patent Assignee: (TARG-) TARGET TECHNOLOGIES INC
Author (Inventor): FLOHR D P; ROSS S
Number of Patents: 006
Number of Countries: 045
Patent Family:

CC	Number	Kind	Date	Week	
US	5374952	A	941220	9505	(Basic)
WO	9430015	A1	941222	9505	
WO	9430017	A1	941222	9505	
AU	9347723	A	950103	9522	
AU	9468146	A	950103	9522	
EP	701761	A1	960320	9616	

Priority Data (CC No Date): US 199377 (940218); US 72201 (930603)
Applications (CC,No,Date): WO 93US6587 (930713); WO 94US3801 (940407); AU 9347723 (930713); AU 9468146 (940407); EP 94916522 (940407); WO 94US3801 (940407)
Language: English
EP and/or WO Cited Patents: 7.Jnl.Ref; EP 535890; FR 2590429; US 4893326; 2.Jnl.Ref; EP 119588; US 4564940; US 4675866; US 4885747
Designated States
(National): AT; AU; BB; BG; BR; CA; CH; DE; DK; ES; FI; GB; HU; JP; KP; KR ; LK; LU; MG; MN; MW; NL; NO; PL; RO; RU; SD; SE; BY; CZ; KZ; NZ; PT; SK; UA; VN
(Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC; NL; OA; PT ; SE; LI
Filing Details: AU9347723 Based on WO 9430015; AU9468146 Based on WO 9430017; EP0701761 Based on WO 9430017

Abstract (Basic): US 5374952 A

The *****video*****-*****conferencing***** network serves a number of digital computer stations, each including an image display, a digital computer for processing data, a video camera for producing image signals. A microphone converts sound into audio signals, and a modulator connected to the digital computer the video camera and the microphone, converts camera signals and associated audio signals into television signals at a selected frequency channel. A

demodulator converts the television signals into video signals and associated audio signals. A display controller, a sound transducer, and two input/output ports are also provided.

The network includes a signalling local area network (A-LAN), connected to the first port of a number of stations, for handling data signals, and a broadband local area network (B-LAN) connected to the second port for transferring television signals, each being transmitted at a selected frequency channel. A software program generates and receives data messages, transmitted via the A-LAN, to and from the computers of other stations, respectively. The data messages initiate and control the transmission of the television signals on the B-LAN, with each television signal being assigned to a *****separate***** frequency *****channel*****. The software program in each computer monitors the status of the channel allocations and generates channel selecting control signals for the modulator and demodulator.

ADVANTAGE - Flexible multimedia data interchange. Secure against unauthorised monitoring by connection of conventional TV set or other terminal.

Dwg.1/26

File Segment: EPI
Derwent Class: T01; W01; W02;
Int Pat Class: H04N-007/10; H04N-007/14; H04N-007/15

Manual Codes (EPI/S-X): T01-H07C; W01-A06B5A; W01-A06G3; W02-F08

6/5/8 (Item 8 from file: 351)
DIALOG(R)File 351:DERWENT WPI

009794823 WPI Acc No: 94-074676/09
XRPX Acc No: N94-058355 *Image available*
Determination of optimum routing in multicast ATM network - finding routes between source node and multiple end nodes via intermediate nodes, totalling weights for traffic congestion, and using route with minimised weighting
Patent Assignee: (BELL-) BELL COMMUNICATIONS RES
Author (Inventor): LIEW S C
Number of Patents: 001
Number of Countries: 001
Patent Family:

CC	Number	Kind	Date	Week	
US	5291477	A	940301	9409	(Basic)

Priority Data (CC No Date): US 927761 (920810)
Abstract (Basic): US 5291477 A

In a network including a multi-cast tree having nodes interconnected by links, and including a source node, multiple end nodes and multiple intermediate nodes, the routing method between the source and end nodes involves assigning a weight to each link of tree. Each weight represents a traffic congestion level on the link, and the combined total of link weights from the source node to the multiple end nodes is minimised to determine the optimal routes.

The minimisation is partly accomplished by an optimal algorithm which utilises a trimming procedure, and which restricts the solution space to a subset of all possible solutions. The network is a switching network.

USE/ADVANTAGE - E.g. for network supporting *****tele*****-*****conferencing*****, video rental etc. Quick call set-up.

Dwg.5d/7

File Segment: EPI
Derwent Class: W01;
Int Pat Class: H04L-012/48; H04Q-011/04
Manual Codes (EPI/S-X): W01-A03B1; W01-A06B4; W01-A06E1; W01-A06G2; W01-B07

6/5/9 (Item 9 from file: 351)
DIALOG(R)File 351:DERWENT WPI

009628887 WPI Acc No: 93-322436/41
XRPX Acc No: N93-248476
Multiplexer for time channel data e.g. in video telephone system - has addressing circuit for main memory set to given state upon detection of data frame for each channel
Patent Assignee: (PHIG) PHILIPS PATENTVERWALTUNG GMBH; (PHIG) PHILIPS ELECTRONICS NV; (PHIG) US PHILIPS CORP
Author (Inventor): WAHL H
Number of Patents: 005
Number of Countries: 005
Patent Family:

CC	Number	Kind	Date	Week	
EP	565203	A2	931013	9341	(Basic)

DE 4211671	A1	931014	9342
JP 6189031	A	940708	9432
US 5363378	A	941108	9444
EP 565203	A3	950503	9545

Priority Data (CC No Date): DE 4211671 (920407)
Applications (CC,No,Date): EP 93201022 (930407); EP 93201022 (930407); JP 9380590 (930407); US 29813 (930311)
Language: German
EP and/or WO Cited Patents: No-SR.Pub; 1.Jnl.Ref; DE 3726359 X; EP 119843 X; EP 173274 X
Designated States (Regional): DE; FR; GB
Abstract (Basic): EP 565203 A

The multiplexer has an addressing circuit (6,8) for addressing a main memory (3) holding data for selected channels and a detector (11 - 16) which detects the frames and/or multiple frames in the data for each channel, to control the addressing circuit.

Pref. the addressing circuit uses a write-in counter (6) which is set in a given state for each different address location, upon detection of the *****channel***** data frame or *****multiple***** frame, under control of a processor (4) coupled to the detector. The multiplexing of the data for all channels is effected by the read out of the main memory.

USE - For video codec, to allow transmission of video data via ISDN telephone lines.

Dwg.2/2

Abstract (US): 9444 US 5363378 A

The transmission system has a transmitter and a receiver for transmitting related data over at least two channels. The receiver multiplexes received data, which are structured *****channel***** -sequentially in frames and/or *****multiple***** frames. The receiver has a main memory (3), for storing, channel-sequentially, data of predetermined channels. It has an addressing device for addressing the main memory.

A detector (11,13,13A,14,15,16) for detecting, *****channel***** -sequentially, frames and/or *****multiple***** frames in the data stored in the main memory. A controller (6,8) sets the addressing device, w.r.t. one of the predetermined channels in which a frame and/or multiple frame is detected, at a predetermined count, whereby the addressing device initialized.

USE/ADVANTAGE - *****Video***** *****conferencing***** system. Can combine data from more than two channels.

Dwg.2/2

File Segment: EPI
Derwent Class: W01; W02;
Int Pat Class: H04J-003/06; H04L-005/22; H04L-007/04; H04M-011/00; H04N-005/44; H04N-007/08; H04N-007/14; H04Q-011/04
Manual Codes (EPI/S-X): W01-B07; W01-C05B1E; W02-F08B3; W02-K02

6/5/10 (Item 10 from file: 351)
DIALOG(R)File 351:DERWENT WPI

009245849 WPI Acc No: 92-373267/45
Related WPI Accession(s): 90-107570; 90-320531; 93-387018; 96-208922
XRPX Acc No: N92-284594 *Image available*

Video broadcasting and *****teleconferencing***** appts. - uses small liquid crystal modular screens, and video cameras located remotely and

connected to central switching system
Patent Assignee: (KASS/) KASSATLY L S A
Author (Inventor): KASSATLY L S A
Number of Patents: 001
Number of Countries: 001
Patent Family:

CC	Number	Kind	Date	Week	
US	5157491	A	921020	9245	(Basic)

Priority Data (CC No Date): US 573539 (900827); US 258722 (881017); US 308826 (890210); US 457403 (891218)
Filing Details: US5157491 CIP of US 4903126; US5157491 CIP of US 4975771
Abstract (Basic): US 5157491 A

The network has a central switching system for receiving and processing signals from the remote sites. Video signals are generated at the remote sites and transmitted to the central switching system. The central switching system allocates a different channel to the video signals from each one of the remote sites, each channel being indicative of one of the remote sites and having a predetermined carrier frequency. The allocated channels are scanned to generate signals identificative of the allocated channels. The channel identifying signals are fed back to the remote sites over a carrier frequency. The video signals of the allocated channels are compressed and multiplexed by modulating the video signals over a second carrier frequency. The video signals are modulated over the predetermined carrier frequencies of their respective channels and over the second carrier frequency. The multiplexer signals are transmitted to the selecting remote sites.

Each remote site uses the feedback channel identifying signals to selectively identify and select the channels to be revised. The multiplexed signals are demultiplexed and sepd. into *****separate***** *****channels*****. The sepd. signals are stored for a predetermined period of time. The signals of the selected channel are decompressed and reconstructed on a real-time basis. The reconstructed signals of the selected channel are displayed on a real-time basis.

ADVANTAGE - Reduces use of paper, more efficient video channel allocation.

Dwg.6/23

File Segment: EPI
Derwent Class: W02;
Int Pat Class: H04N-007/04; H04N-007/14
Manual Codes (EPI/S-X): W02-F03A

6/5/11 (Item 11 from file: 351)
DIALOG(R)File 351:DERWENT WPI

008879818 WPI Acc No: 92-007089/01
XRPX Acc No: N92-005481 *Image available*
*****Multiple***** clock rate *****teleconferencing*****
*****network***** - has hub-resident communication switching appts. with TDM pipeline bus interfacing with multiple nodes at different clock rates
Patent Assignee: (HARO) HARRIS CORP
Author (Inventor): TODD S P
Number of Patents: 001
Patent Family:

CC	Number	Kind	Date	Week

US 5072442 A 911210 9201 (Basic)
Priority Data (CC No Date): US 487075 (900228)
Abstract (Basic): US 5072442

The switching apparatus includes an internal TDM bus to which node interface units, an audio combiner unit and a timing and control unit are coupled. Each node interface unit is associated with a respective node and is operative to receive and forward communication signals with respect to its node at the clock rate of the service used by that node. The hub's TDM bus includes a video/PC file bus and an audio/command bus and operates at a clock rate that is a multiple of the number of nodes in the network times the highest clock frequency of any node in the network divided by the bit width of the TDM bus. Each unit interfaces with the TDM bus by way of a pipeline bus interface unit.

The audio combiner unit outputs digitised combined audio signal packets onto the audio bus for transmission to its associated node. The output section of the audio combiner unit includes an audio packet input buffer whose contents are processed in dependence upon the occupancy status of each audio packet input buffer in the combiner. As long as there is sufficient audio data stored in one or more buffers to ensure effectively continuous audio processing, audio data is processed and forwarded for transmission. If the audio packet input buffers have very little or no audio data, then processing is delayed.

USE/ADVANTAGE - Hub-resident data switching appts. for multinode *****teleconferencing***** *****network*****, enables *****multiple***** node sites, operating at differing clock rates, to communicate with each other asynchronously and simultaneously. @(15pp Dwg.No.3/8)@

File Segment: EPI
Derwent Class: W01; W02; R56; R57; R58;
Int Pat Class: H04J-003/22; H04M-003/56; H04Q-011/04
Manual Codes (EPI/S-X): W01-A03C; W01-A06B1; W01-A06B3; W01-A06B5; W01-A06F ; W01-A06G3; W01-C03; W01-C05B; W01-C05B7; W02-K02B5

6/5/12 (Item 12 from file: 351)
DIALOG(R)File 351:DERWENT WPI

008149960 WPI Acc No: 90-036961/05
XRPX Acc No: N90-028401 *Image available*

Video-audio communication establishment method - using public switch network lines to transmit control signals from conference room to satellite modems

Patent Assignee: (AMTT) AMERICAN TEL & TELEG CO
Author (Inventor): MAHMOUD M; MAHMOUD M F
Number of Patents: 005
Number of Countries: 010
Patent Family:

CC	Number	Kind	Date	Week	
US	4882743	A	891121	9005	(Basic)
EP	353945	A	900207	9006	
EP	353945	B1	940309	9410	
DE	68913616	E	940414	9416	
CA	1330236	C	940614	9429	

Priority Data (CC No Date): US 226491 (880801)
Applications (CC,No,Date): CA 601764 (890605); EP 89307633 (890727); EP 89307633 (890727); DE 613616 (890727); EP 89307633 (890727)
Language: English; German
EP and/or WO Cited Patents: US 4360827; US 4516156; US 4650929; US 4739510;

01Jnl.Ref
Designated States
(Regional): BE; CH; DE; ES; FR; GB; IT; LI
Filing Details: DE68913616 Based on EP 353945
Abstract (Basic): US 4882743

The *****video*****-*****conferencing***** method comprises the steps of designating one of the conference rooms to be the director's conference room and assigning a broadcast satellite channel to broadcast from any one of the conference rooms to all other conference rooms. An auxiliary satellite channel is assigned to transmit from any one of the other conference rooms to the room assigned to the broadcast satellite *****channel*****, using frequency division *****multiple***** access satellite transmission of the broadcast channel and the auxiliary channel.

Public switch network lines are used to transmit control signals from the director's conference room to satellite modulators-demodulators (modems) located at earth stations via a video *****teleconferencing***** switching controller and a monitor and remote controller at each earth station coupled to selectively tune the modulators to the broadcast channel or the auxiliary channel, and to selectively tune the demodulators to one of the two channels, and to selectively turn the modulators on or off. @(22pp Dwg.No.1/15)@

Abstract (EP): 9410 EP 353945 B

A method for establishing video-audio communications between more than two remotely located conference rooms, characterised by designating one of the conference rooms to be the director's conference room, assigning a broadcast satellite channel to broadcast from any one of the conference rooms to all other conference rooms, assigning an auxiliary satellite channel to transmit from any one of the other conference rooms to the room assigned to the broadcast satellite *****channel*****, using frequency division *****multiple***** access satellite transmission of the broadcast channel and the auxiliary channel, and using public switch network lines to transmit control signals from the director;s conference room to satellite modulators-demodulators (modems) located at earth stations via a video *****teleconferencing***** switching controller and a monitor and remote controller at each earth station coupled to selectively tune the modulators to said broadcast channel or said auxiliary channel, and to selectively tune the demodulators to one of the two channels, and to selectively turn the modulators on or off.

Dwg.1/15

File Segment: EPI
Derwent Class: W01; W02; R57;
Int Pat Class: H04M-011/00; H04N-007/14; H04N-007/15
Manual Codes (EPI/S-X): W01-C05B1; W02-F09

6/5/13 (Item 13 from file: 351)
DIALOG(R)File 351:DERWENT WPI

004808363 WPI Acc No: 86-311704/48
Related WPI Accession(s): 84-256597
XRPX Acc No: N86-233105

Multi-function work-station has coaxial cable carrying transmitted and received audio, video and data information by frequency division multiplexing

Patent Assignee: (DATA-) DATAPOINT CORP
Author (Inventor): RICE F B
Number of Patents: 005

Number of Countries: 004
Patent Family:

CC	Number	Kind	Date	Week	
AU	8655723	A	861016	8648	(Basic)
JP	61281690	A	861212	8704	
US	4710917	A	871201	8750	
US	4847829	A	890711	8935	
KR	9409586	B1	941015	9636	

Priority Data (CC No Date): US 721281 (850408)
Applications (CC,No,Date): KR 862651 (860408); AU 8655723 (860407); JP 8679326 (860408); US 126845 (871125)
Abstract (Basic): AU 8655723

The conferencing network comprises a number of video terminals and receiving real time video and audio information and data over the network. A switching arrangement is provided for receiving audio and video information on one of a number of audio/video ports and selectively interconnecting the received audio/video to one or more of the remaining audio/video ports to provide an audio and video path between two or more of said video terminals. A control is in data communication with each video terminal and the switching arrangement for configuring the switching arrangement to provide audio and video paths in response to data communication between the video terminals and the control.

A communication link interconnects each video terminal with one of the audio/video ports of the switching arrangement for audio and video transmission, the communication link also providing a data link between the video terminals and control. The communication link provides for full duplex transmission such that audio, video and data information can be received simultaneously with transmission of such information. @(233pp Dwg.No.1,2/33)@

Abstract (US): 8935 US 4847829

The network includes remote video terminals interconnected to a switching network through coaxial cables. The switching network is operable to provide an audio and video data path between two or more video terminals. The switching network operates as both an audio/video crosspoint switch and also as a network controller. In the network control mode, the switching network operates in both a master mode for maintaining data communication with all of the video terminals and also in a slave mode for maintaining status of devices attached to the switching network. In the master mode, the switching network receives requests from each of the video terminals and services these requests to determine available data paths for interconnection with other video terminals.

**********In the slave mode, the switch is in data communication with all of the video terminals to determine the status which is stored in a slave status table. This information in the status table is transferred to a *****separate***** *****network***** table that is maintained in the master mode for network purposes.

ADVANTAGE - Provides video, audio, and data communication between remotely disposed video terminals. @(58pp)@ 8750 US 4710917

**********The *****video***** *****conferencing***** network includes remote video terminals interconnected to a switching network through coaxial cables. The switching network is operable to provide an audio and video data path between two or more video terminals. The switching network operates as both an audio/video cross-point switch and also as a network controller. In the network control mode, the switching network operates in both a master mode for maintaining data communication with all of the video terminals and also in a slave mode for maintaining status of devices attached to the

switching network.

**********In the master mode, the switching network receives the requests from each of the video terminals and servides these requests to determine available data paths for interconnection with other video terminals. In the slave mode, the switch is in data communication with all of the video terminals to determine the status thereof which is stored in a slave status table. This information in the status table is transferred to a *****separate***** *****network***** table that is maintained in the master mode for network purposes. @(61pp)@

File Segment: EPI
Derwent Class: W01; W02; R57; R58
Int Pat Class: H04M-011/00; H04N-007/14; H04N-011/00; H04Q-011/04
Manual Codes (EPI/S-X): W01-C05B; W02-F09

File 351:DERWENT WPI 1981-1996/UD=9642;UA=9638;UM=9631
(c)1996 Derwent Info Ltd
File 350:Derwent World Pat. 1963-1980/UD=9640
(c) 1996 Derwent Info Ltd
File 348:EUROPEAN PATENTS 1978-1996/OCT W4
(c) 1996 European Patent Office
File 347:JAPIO OCT 1976-1996/May.
(c) JPO & JAPIO
File 344:Chinese Patents ABS Apr 1985-1996/Oct
(c) 1996 European Patent Office

Set	Items	Description
S1	862	(TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-IDEOTELECONFERENC?
S2	0	S1 AND (VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHANG-?)
S3	0	S2 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S4	4	S1 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S5	13	S1 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR CHANNEL?)
S6	13	S5 NOT S4
S7	10	S1 AND ((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?)) AND (-NETWORK?(N10)(AUDIO OR VIDEO)))
S8	9	S7 NOT (S4 OR S6)

8/5/1 (Item 1 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010887022 WPI Acc No: 96-383973/38
Related WPI Accession(s): 95-035846; 96-039679
XRPX Acc No: N96-323644 *Image available*
Video *****teleconferencing***** appts for distributed data processing system - includes source device of local workstation which sends audio and video *****data***** to receiver device of remote workstation over one variable bandwidth *****digital***** *****data***** connection
Patent Assignee: (DIGI) DIGITAL EQUIP CORP
Author (Inventor): PALMER L G; PALMER R S
Number of Patents: 001
Number of Countries: 001
Patent Family:

CC	Number	Kind	Date	Week	
US	5546324	A	960813	9638	(Basic)

Priority Data (CC No Date): US 893074 (920603); US 343657 (941122)
Filing Details: US5546324 Cont of US 5375068
Abstract (Basic): US 5546324 A

The appts includes a source device for a local workstation to send *****audio***** and video *****data***** across the *****digital***** *****data***** local area *****network***** connecting the computer workstations as *****digital***** *****data***** packets to a remote workstation. A receiver device receives *****audio***** and video *****data***** from across the *****digital***** *****data***** local area *****network***** as *****digital***** *****data***** packets sent from source device of the remote workstation.

The source device of the local workstation sends audio and video data to the receiver device of the remote workstation over one variable

bandwidth *****digital***** *****data***** connection. The source device of the remote workstation sends audio and video data to the receiver device of the local workstation over another variable bandwidth *****digital***** *****data***** connection.

ADVANTAGE - Provides full colour and telephone quality audio. Provides real-time visual communication.

Dwg.1/26

File Segment: EPI
Derwent Class: T01; W01; W02;
Int Pat Class: H04L-012/18
Manual Codes (EPI/S-X): T01-H07C; T01-J09; T01-J10G; T01-M02A1; W01-A06C1; W01-A06F; W02-F08A1

8/5/2 (Item 2 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010789641 WPI Acc No: 96-286594/29
XRPX Acc No: N96-240622 *Image available*

*****Digital***** *****video***** synchronisation system for *****data***** received over asynchronous telecommunication *****network***** - synchronising input of video data into video buffer with reading, by positioning and clipping video data prior to output of video data to formatting system, such that video display signal includes video data from only single frame at a time

Patent Assignee: (AMTT) AT & T CORP
Author (Inventor): GAGLIANELLO R D; KATSEFF H P
Number of Patents: 001
Number of Countries: 001
Patent Family:

CC	Number	Kind	Date	Week	
US	5526024	A	960611	9629	(Basic)

Priority Data (CC No Date): US 849901 (920312); US 289987 (940812)
Abstract (Basic): US 5526024 A

The input of *****video***** data from an asynchronous *****network***** to a *****video***** data buffer is synchronized with the reading of information from the video data buffer. Synchronizing video data transfers to and from a video data buffer ensures that video data from only a single frame from a source is displayed on a display monitor at one time, maintaining image quality.

Multiple video data streams from several asynchronous sources can be displayed simultaneously on a single display screen using the synchronization technique. The synchronisation arrangement synchronizes receipt of the different data streams into the frame buffer with the output of data from the frame buffer to the display screen.

USE/ADVANTAGE - *****Video***** image quality is preserved in asynchronous *****network***** by providing synchronising arrangement. For multi-party *****video***** *****teleconferencing*****.

Dwg.4/7

File Segment: EPI
Derwent Class: P85; T01; W01; W02;
Int Pat Class: G09G-005/00
Manual Codes (EPI/S-X): T01-C07A; T01-C07C2; T01-H07C; T01-J09; T01-J10X; W01-A04; W01-A06X; W02-F08A3

8/5/3 (Item 3 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010600843 WPI Acc No: 96-097796/10
XRPX Acc No: N96-081604 *Image available*
Self-contained digitally *****networked***** *****video***** camera - has housing contg. camera module having video image sensor, and processing unit including both video signal processor and multi-tasking RISC processor for compressing or analysing video and data signals; *****VIDEO*****-*****CONFERENCING***** PC *****NETWORK*****
Patent Assignee: (VISI-) VISION INT LTD; (VISI-) VISION 1 INT LTD
Author (Inventor): VELLACOTT O R
Number of Patents: 003
Number of Countries: 064
Patent Family:

CC	Number	Kind	Date	Week	
WO	9602106	A1	960125	9610	(Basic)
AU	9528942	A	960209	9619	
GB	2296156	A	960619	9628	

Priority Data (CC No Date): GB 9413870 (940709)
Applications (CC,No,Date): WO 95GB1626 (950710); GB 964702 (960305); WO 95GB1626 (950710); AU 9528942 (950710)
Language: English
EP and/or WO Cited Patents: 3.Jnl.Ref; EP 617542; US 5319751; WO 9107850
Designated States
(National): AM; AT; AU; BB; BG; BR; BY; CA; CH; CN; CZ; DE; DK; EE; ES; FI ; GB; GE; HU; IS; JP; KE; KG; KP; KR; KZ; LK; LR; LT; LU; LV; MD; MG; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; TJ; TM; TT; UA; UG; US; UZ; VN
(Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; KE; LU; MC; MW; NL ; OA; PT; SD; SE; SZ; UG
Filing Details: GB2296156 Based on WO 9602106; AU9528942 Based on WO 9602106
Abstract (Basic): WO 9602106 A

The video camera has a housing enclosing a video image sensor and a signal processing unit. The latter processes the video signal and outputs a digital dat signal. A *****digital***** interface input/output device is adapted to transmit the *****digital***** *****data***** signal to an externa *****digital***** communications network in accordance with a predetermined communications protocol.

The signal processing unit includes a video signal processor (VSP) which performs real-time image compression and/or image analysis of the video signal. A microprocessor supervises the operation of the VSP and the data input/output via the interface.

ADVANTAGE - Allows automation of wide range of visual and *****audio***** tasks via remote control over *****network*****. Avoids need for direct-connected personal computer. Dwg.3/4

File Segment: EPI
Derwent Class: T01; W01; W02; W04;
Int Pat Class: H04N-005/232
Manual Codes (EPI/S-X): T01-C03A; T01-H07C; T01-J10X; W01-A06X; W02-F08; W04-M01D6; W04-M01D9

8/5/4 (Item 4 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010542725 WPI Acc No: 96-039679/04
Related WPI Accession(s): 95-035846; 96-383973

XRPX Acc No: N96-033438 *Image available*
*****Video***** *****teleconferencing***** appts. for scaling *****data***** in *****digital***** communication *****network***** - halves amount of horizontal lines in image and number of pixels in line prior to transmission and, on receiving signal, rescales by replicating individual pixels to replace adjacent pixels and similarly with reconstructed lines
Patent Assignee: (DIGI) DIGITAL EQUIP CORP
Author (Inventor): PALMER L G; PALMER R S
Number of Patents: 001
Number of Countries: 001
Patent Family:

CC	Number	Kind	Date	Week	
US	5475421	A	951212	9604	(Basic)

Priority Data (CC No Date): US 915087 (920716); US 893074 (920603); US 893234 (920603)
Filing Details: US5475421 CIP of US 5375068
Abstract (Basic): US 5475421 A
The appts. uses a distributed *****data***** processing system with computer workstations connected by a *****digital***** *****data***** network. Each workstation has a source for a local workstation to send scaled *****video***** data across the *****network***** to a remote workstation. The unscaled *****video***** data has V horizontal lines of H pixels each. The source reduces (552) the quantity of horizontal lines to about V/2 and the quantity of pixels per line to about H/2.
A receiver in each workstation receives (556) scaled *****video***** data from across the *****network***** sent (554) from the remote workstation source. The receiver replicates the received scaled video data pixels to obtain V horizontal lines and H pixels along each line. Received pixels are replicated (558) to replace adjacent pixels along a line and the reconstructed line is replicated (560) to replace an adjacent line. The line is then shifted horizontally (562) relative to the line from which it was replicated.
ADVANTAGE - Efficiently reconstructs high-quality video image from one quarter of original video data. Enhances throughput.
Dwg.27/28
File Segment: EPI
Derwent Class: T01; W01; W02;
Int Pat Class: H04N-007/14
Manual Codes (EPI/S-X): T01-J09; T01-J10A1; W01-C01G4; W01-C01G5; W02-F08A3

8/5/5 (Item 5 from file: 351)
DIALOG(R)File 351:DERWENT WPI

010269171 WPI Acc No: 95-170426/22
XRPX Acc No: N95-133587 *Image available*
Local area network for two-way transmission of wide bandwidth signals - includes flexible economic switching matrix allowing segmenting of channels, also providing equalisation to compensate for signal degradation
Patent Assignee: (VIDE-) VIDEOLAN TECHNOLOGIES INC
Author (Inventor): FENOUIL R L
Number of Patents: 005
Number of Countries: 058
Patent Family:

CC	Number	Kind	Date	Week

WO 9511570	A1	950427	9522	(Basic)
AU 9480782	A	950508	9533	
US 5537142	A	960716	9634	
EP 724811	A1	960807	9636	
FI 9601718	A	960419	9637	

Priority Data (CC No Date): US 140230 (931020)
Applications (CC,No,Date): WO 94US11722 (941018); FI 961718 (960419); WO 94US11722 (941018); AU 9480782 (941018); EP 94931857 (941018); WO 94US11722 (941018)
Language: English
EP and/or WO Cited Patents: 4.Jnl.Ref; GB 2094592; US 4766589
Designated States
(National): AM; AT; AU; BB; BG; BR; BY; CA; CH; CN; CZ; DE; DK; ES; FI; GB ; GE; HU; JP; KE; KG; KP; KR; KZ; LK; LT; LU; LV; MD; MG; MN; MW; NL; NO; NZ; PL; PT; RO; RU; SD; SE; SI; SK; TJ; TT; UA; US; UZ; VN
(Regional): AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; KE; LU; MC; MW; NL ; OA; PT; SD; SE; SZ; LI
Filing Details: AU9480782 Based on WO 9511570; EP0724811 Based on WO 9511570
Abstract (Basic): WO 9511570 A

A local area network uses plural crosspoint switches in a matrix network. The matrix defines upstream, downstream and user connections, providing bidirectional switching between all connected users, and between every upstream/downstream connection. Compared with a single, standard crosspoint switch, interconnecting all inputs and outputs, less than half the number of switching points are required in the system.

Simultaneous transmission of analogue video and *****digital***** *****data***** signals over twisted-pair cable, equalised at reception in the matrix, enables comprehensive switching and transmission to all connected users.

USE/ADVANTAGE - Economic, flexible, channel-segmented local area *****network***** for simultaneous, two-way transmission of *****video***** bandwidth signals, eg. in *****video*****-*****conferencing*****, remote control and monitoring of video camera outputs, etc., with signal equalisation enabling long-distance use of twisted-pair wiring.

Dwg.4/25

Abstract (US): 9634 US 5537142 A

A device for the simultaneous, bi-directional transmission of video bandwidth signals, comprising:

a plurality of user ports;

a plurality of channel up ports;

a plurality of channel down ports; and

a switching matrix, comprising a plurality of switching points; and

wherein said switching matrix permits the simultaneous, bi-directional transmission of video bandwidth signals between users, between users and up channels, and between users and down channels.

Dwg.7A/13
File Segment: EPI
Derwent Class: W01; W02;
Int Pat Class: H04N-000/00; H04N-005/268; H04N-007/14; H04N-007/173
Manual Codes (EPI/S-X): W01-A06B5A; W01-A06C2B; W01-A06G1; W02-C01B2; W02-F08A

8/5/6 (Item 6 from file: 351)
DIALOG(R)File 351:DERWENT WPI

009756540 WPI Acc No: 94-036391/05
XRPX Acc No: N94-028322

Audio-video communications processor serving group of work-stations - has audio and video processors coupled to digital bus via multiplexer, each processor having signal compression and weighting based on user requirements; *****TELECONFERENCING***** LONG HAUL

Patent Assignee: (IBMC) INT BUSINESS MACHINES CORP; (IBMC) IBM CORP
Author (Inventor): CACI J C

Number of Patents: 004
Number of Countries: 006
Patent Family:

CC	Number	Kind	Date	Week	
EP	581101	A1	940202	9405	(Basic)
CA	2096160	A	940130	9416	
JP	6225266	A	940812	9437	
US	5392223	A	950221	9513	

Priority Data (CC No Date): US 921536 (920729)
Applications (CC,No,Date): EP 93111135 (930712); CA 2096160 (930513); JP 93180784 (930625)
Language: English
EP and/or WO Cited Patents: 2.Jnl.Ref; EP 119588; US 4494144; US 4541008; US 4682225
Designated States (Regional): DE; FR; GB

Abstract (Basic): EP 581101 A

The audio-video communication processor for coupling work-station units in a system transmitting audio and video *****data***** over a carrier, includes a processor having a *****digital***** bus coupling elements connected to it. A number of network interface ports include a port for a network carrier signal and a port for a local loop carrier signal. The processor transmits data of the carrier signals from one port to another and from a coupled work-station port.

The system also includes a work-station interface, a video processor and an audio processor, with both processors being interconnected to pass digital and analog signals between them. A channel frame processor controls combination over the digital bus, and a statistical audio/video multiplexing processor is connected to the digital bus for dynamically allocating bandwidth between audio and video signals on the bus.

USE/ADVANTAGE - For telecommunications interface. Also for artificial intelligence applications for setting conditions of facsimile usage. Models communications channel, usage situation, and channel transmission in system shared by several users.

Dwg.7B/16

Abstract (US): 9513 US 5392223 A

The system comprises a communication processor having a digital bus for intercoupling elements coupled to the communication processor, and a number of network interface ports including a port for a network carrier signal and a port for a local loop carrier signal, and a device for transmitting information carried by the port carrier signals from one network port to another network port and from a coupled workstation to a *****network***** port. A workstation interface, a *****video***** processor and an *****audio***** processor for processing video and audio information at a workstation level, are interconnected to pass digital and analog signals between them and for passing digital information via the digital bus to the communications processor.

A channel frame processor is connected to the digital bus for

controlling communication over the digital bus, and a statistical audio/video multiplexing processor is connected to the digital bus for dynamically changing an allocation of bandwidth bits between audio and video information signals on the digital bus based on changes in an amount of activity of the audio or video signals during a transmission of the audio and video information signals.

USE - For workstation *****video*****-*****conferencing*****.

Dwg.2/7

File Segment: EPI
Derwent Class: W02;
Int Pat Class: G06F-013/362; G06K-015/00; H04J-003/17; H04L-005/00; H04N-001/00; H04N-007/13; H04N-007/14; H04Q-011/04
Manual Codes (EPI/S-X): W02-F07; W02-F08; W02-K02E; W02-K06

8/5/7 (Item 7 from file: 351)
DIALOG(R)File 351:DERWENT WPI

009326192 WPI Acc No: 93-019655/03
XRPX Acc No: N93-015078 *Image available*

*****Teleconference***** terminal equipment for exchanging e.g. speech and video - has network interface and communications network control unit, multi-media multiplexing and demultiplexing and inter-terminal signal control unit

Patent Assignee: (HITA) HITACHI LTD
Author (Inventor): ISHIBASHI A; ISHIDA K; MATSUSHIMA H; SHIBATA Y; TAKIZAWA M; YAMADA T; YOSHIDA A
Number of Patents: 010
Number of Countries: 007
Patent Family:

CC	Number	Kind	Date	Week	
EP	523617	A2	930120	9303	(Basic)
JP	5022719	A	930129	9309	
AU	9219639	A	930121	9310	
CA	2073920	A	930116	9313	
JP	5207452	A	930813	9337	
AU	645431	B	940113	9408	
AU	9351827	A	940203	9411	
EP	523617	A3	930915	9509	
AU	661928	B	950810	9540	
US	5477546	A	951219	9605	

Priority Data (CC No Date): JP 9214173 (920129); JP 91174046 (910715)
Applications (CC,No,Date): US 913489 (920715); EP 92111958 (920714); AU 9219639 (920714); CA 2073920 (920715); AU 9219639 (920714); AU 9219639 (920714); AU 9351827 (931112); EP 92111958 (920714); AU 9219639 (920714); AU 9351827 (931112)
Language: English
EP and/or WO Cited Patents: No-SR.Pub; 5.Jnl.Ref; EP 418396 A; JP 2039693 A; JP 2095089 A; JP 2095090 A; JP 2104080 X; JP 3035679 X; US 5062136 P
Designated States (Regional): DE; FR; GB
Filing Details: AU0645431 Previous Publ. AU 9219639; AU0661928 Previous Publ. AU 9351827

Abstract (Basic): EP 523617 A

The terminal equipment comprises a communication controller for transmitting and receiving communication frames through a *****digital***** communication channel. Each frame contains video

*****data*****, audio *****data*****, user *****data***** and control data. A multiplexer and demultiplexer unit processes the various data of each frame. A picture coder decodes a picture signal from the video data and delivers an output. An input picture signal is coded into video data and transferred to the multiplexer and demultiplexer unit.

A camera supplies picture codes with a picked-up picture signal as the picture signal to be coded. A display unit display a picture indicated by the picture signal. An audio codec decodes speech signals and codes input signals into audio data. A microphone supplies audio codec. A loudspeaker emits speech using the speech signal. Various controllers control cameras and camera output and video inputs and outputs.

ADVANTAGE - Flexibly copes with all intended uses, small-size, easily portable, realises *****teleconference***** system or video telephone system when connected to existing display unit.

Dwg.1/33

Abstract (US): 9605 US 5477546 A

A *****teleconference***** terminal equipment adapted to construct an AV meeting system as an intended use, comprising a network interface and communications network control unit, a multimedia multiplexing/demultiplexing and interterminal signal control unit which multiplexes and demultiplexes video data and control data contained in a communication frame to be transmitted by the control unit and a communication frame received by the same, respectively, a picture codec which codes and decodes video data, a video input/output interface which connects an external camera to the picture codec, a camera control/external device multiconnector, and a CPU which controls an operation of the external camera through the multiconnector on the basis of control data delivered from the control unit.

Dwg.1/33

File Segment: EPI
Derwent Class: W01; W02;
Int Pat Class: H04L-012/18; H04N-007/14; H04N-007/15
Manual Codes (EPI/S-X): W01-C01G5; W01-C05B7A; W02-F08A3

8/5/8 (Item 8 from file: 351)
DIALOG(R)File 351:DERWENT WPI

009223874 WPI Acc No: 92-351295/43
XRPX Acc No: N92-267834 *Image available*

Multi-cast server appts. for asynchronous transfer mode switches - includes chainer operating in feedback mode to produce sequence of addresses recognisable by distributor; ATM

Patent Assignee: (ROKE-) ROKE MANOR RES LTD; (LOAK-) LOAK MANNER RES LTD
Author (Inventor): DAVIS S P; STEWART I B
Number of Patents: 005
Number of Countries: 011
Patent Family:

CC	Number	Kind	Date	Week	
EP	509648	A1	921021	9243	(Basic)
GB	2254980	A	921021	9243	
JP	5110562	A	930430	9322	
US	5287530	A	940215	9407	
GB	2254980	B	950308	9513	

Priority Data (CC No Date): GB 918088 (910416)
Applications (CC,No,Date): EP 92302408 (920320); GB 918088 (910416); JP 9295426 (920415); US 862662 (920402)

Language: English
EP and/or WO Cited Patents: 3.Jnl.Ref; WO 8909521
Designated States
(Regional): AT; CH; DE; FR; GB; IT; LI; NL; SE
Abstract (Basic): EP 509648 A

The appts. comprises a switch function unit with input, output and transfer ports. Data cells for multicasting are routed from the input port to the transfer port. Two header translation units each have an input and output terminal and serve respectively as the chainer and the distributor. The input terminals of the chainer and distributor are respectively coupled to the transfer port to receive data for multicasting.

The chainer is effective to change address data associated with each data cell fed to it to a form recognisable by the distributor and to feed back data cell together with its changed address to the transfer port. The distributor converts recognisable address data associated with data cells fed to it to corresp. route address tags and feeds cells having such address tags to the output port.

USE - For, e.g., *****video***** *****conferencing*****, *****video***** lecture calls and distributed databases and broadcast signalling at user *****network***** interface.

Dwg.3/3

Abstract (US): 9407 US 5287530 A

A multicast server apparatus includes a switch function unit having an input port, an output port and a transfer port, data cells for multicasting being routed from the input port and to the transfer port, first and second header translation units each having an input terminal and an output terminal. The translation units serve respectively as a chainer and as a distributor. The input terminals of the chainer and the distributor is coupled to the transfer port of the switch function unit to receive data for multicasting.

The chainer changes address data associated with each data cell fed thereto to a form recognisable by the distributor and to feed back such data cell together with its changed address data to the transfer port. The distributor convert recognizable address data associated with data cells fed thereto to corresponding route address tags, and to feed cells having such address tags to the output port of the switch function unit. Thus, a data cell for multicasting is distributed by the muticasting server apparatus separately to the plurality of different addresses as identified by the address tags.

USE/ADVANTAGE - In ATM switches for async transmission of *****digital***** *****data***** cells which includes address *****data***** water alis, in addition to a data packet pay load, and to route data packet pay load to a member of different address, e.g. in *****video***** *****conferencing*****, *****video***** lecture cells distributed data laser and broadcast signally at user *****network***** interface.

Dwg.3/3

Abstract (GB): 9513 GB 2254980 B

Multi-cast server apparatus operative to effect the onward transmission of data cells to a number of different addresses, comprising a switch function unit having an input port, an output port and a transfer port, data cells for multi-casting being routed from the input port to the transfer port, first and second header translation units each having an input terminal and an output terminal, which translation units serves respectively as a chainer and as a distributor, the input terminals of the chainer and the distributor respectively being coupled to the transfer port of the switch function unit to receive data for multi-casting, the chainer being effective to change address data associated with each data cell fed thereto to a

form recognisable by the distributor and to feed back such data cell together with its changed address data to the said transfer port, and the distributor being effective to convert recognisable address data associated with data cells fed thereto to corresponding route address tags and to feed cells having such address tags to the output port of the switch function unit, whereby a data cell for multi-casting is distributed by the multi-casting server apparatus separately to the said number of different addresses as identified by the said tags.

Dwg.1/1

File Segment: EPI
Derwent Class: W01;
Int Pat Class: H04J-003/24; H04L-012/18; H04L-012/48; H04L-012/56
Manual Codes (EPI/S-X): W01-A03B1; W01-A06G2

8/5/9 (Item 9 from file: 351)
DIALOG(R)File 351:DERWENT WPI

008813926 WPI Acc No: 91-317939/43
XRPX Acc No: N91-243659 *Image available*

Secure video communications system for real-time *****teleconferencing***** - has command *****network***** including *****video*****, *****audio*****, communications and control subsystems for window driven mouse operated data transfer

Patent Assignee: (USAT) US DEPT OF ENERGY; (EGGI) EG & G IDAHO INC
Author (Inventor): SMITH R L
Number of Patents: 002
Patent Family:

CC	Number	Kind	Date	Week	
US	5056136	A	911008	9143	(Basic)
US	7490892	A	911203	9204	

Priority Data (CC No Date): US 490892 (900309)
Abstract (Basic): US 5056136

A secure *****video***** communications system has at least one command *****network***** formed by a combination of subsystems. The combination of subsystems includes a video subsystem, an audio subsystem, a communications subsystem, and a control subsystem. The video communications system is window driven and mouse operated, and has the ability to allow for secure point-to-point real-time *****teleconferencing*****.

The command *****networks***** receive and transmit *****audio*****, *****video*****, and data signals routed through either long distance, satellite, microwave, T-1 carriers, and fibre optic systems (2). The communications subsystem (3) provides the transfer of secure compressed *****video*****, *****audio*****, and data transmissions between *****network***** locations.

USE/ADVANTAGE - Communications system for integration of multimedia, secure communications system that includes high quality, real-time, full motion of freeze frame video, full duplex audio, and *****digital***** *****data***** communications for *****tele*****-*****conferencing*****. Wide command control of multiple video and audio signals. Stores set conferencing configurations and recalls configurations when required. User friendly. @(6pp Dwg.No.2/4)@

File Segment: EPI
Derwent Class: W02; R57;
Int Pat Class: H04N-007/16; H04N-000/01
Manual Codes (EPI/S-X): W02-F05A; W02-F06; W02-F09; W02-L

File 2:INSPEC 1969-1996/Oct W3
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(c) 1996 Cambridge Sci Abs
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(c) 1996 Inst for Sci Info
File 7:Social SciSearch(R) 1972-1996/Oct W3
(c) 1996 Inst for Sci Info
File 439:Arts&Humanities Search(R) 1980-1996/Oct W3
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Set	Items	Description
S1	15052	(TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-IDEOTELECONFERENC?
S2	10862	S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-25)

S3 10 S2 AND (VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHANG-?)
S4 38 S2 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S5 107 S1 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR CHANNEL?)
S6 69 S2 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR CHANNEL?)
S7 65 S2 AND ((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?)) AND (-NETWORK?(N10)(AUDIO OR VIDEO)))
S8 0 S3 AND S4 AND S6 AND S7
S9 0 S3 AND S4 AND S6
S10 0 S3 AND S6 AND S7
S11 0 S3 AND (S4 OR S6 OR S7)
S12 5 RD S3 (unique items)

12/5/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

04314291 INSPEC Abstract Number: B9302-6210M-017, C9302-5620-021
Title: Broadband gigabit research and the LuckyNet testbed
Author(s): Gitlin, R.D.; London, T.B.
Author Affiliation: AT&T Bell Labs., Holmdel, NJ, USA
Journal: Journal of High Speed Networks vol.1, no.1 p.1-47
Publication Date: 1992 Country of Publication: Netherlands
ISSN: 0926-6801
Language: English Document Type: Journal Paper (JP)
Treatment: Applications (A); Practical (P)
Abstract: Describes the motivation, architecture, initial applications, and objectives for LuckyNet, an AT and T Bell Labs gigabit research network. Building upon the B-ISDN infrastructure of SONET transport and the ATM packet protocol, LuckyNet will provide a fertile testbed for investigating: broadband applications, network architectures, gigabit packet switches and LANs, high-throughput protocols and interfaces, and network services and operations (including addressing, routing, signaling, control and security). LuckyNet is a heterogeneous network that has as one of its major objectives the demonstration that diverse classes of user traffic (i.e., *****video*****, *****voice*****, *****data***** , and image), as well as control and management information can efficiently utilize a single ATM infrastructure. Another goal is to provide users with gigabit-per-second network access. Initial applications provide 155 Mbps access and include *****video***** *****conferencing***** , document retrieval, low-latency processor-sharing, and Ethernet interconnection. (37 Refs)
Descriptors: asynchronous transfer mode; B-ISDN; local area networks; packet switching; protocols; SONET
Identifiers: transport protocol; broadband gigabit research; LAN; LuckyNet testbed; AT and T Bell Labs; B-ISDN infrastructure; SONET; ATM packet protocol; network architectures; gigabit packet switches; high-throughput protocols; interfaces; network services; addressing; routing; signaling; control; security; heterogeneous network; video; voice; data; image; management information; *****video***** *****conferencing***** ; document retrieval; low-latency processor-sharing; Ethernet interconnection; 155 Mbit/s
Class Codes: B6210M (ISDN); B6260 (Optical links and equipment); B6210L (Computer communications); C5620 (Computer networks and techniques)
Numerical Indexing: bit rate 1.55E+08 bit/s

12/5/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

04281239 INSPEC Abstract Number: B9212-6210M-056
Title: An ISDN multimedia distance learning trial: Phase One results report
Author(s): Curtis, T.; Davidson, J.; Inkrott, J.; Perley, J.
Author Affiliation: California State Univ., Chico, CA, USA
Conference Title: Proceedings. Pacific Telecommunications Council Fourteenth Annual Conference. PTC '92 p.444-7
Editor(s): Lofstrom, M.D.; Wedemeyer, D.J.
Publisher: Pacific Telecommun. Council, Honolulu, HI, USA
Publication Date: 1992 Country of Publication: USA xx+948 pp.
Conference Date: 12-15 Jan. 1992 Conference Location: Honolulu, HI, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P); Experimental (X)
Abstract: This is a report on a developmental test of a multimedia distance learning platform capable of supporting interactive *****video*****, *****voice*****, *****data***** , and graphics using BRI ISDN lines for transmission. (0 Refs)
Descriptors: education; interactive video; ISDN; multimedia systems; *****teleconferencing*****
Identifiers: voice communication; data communication; conferencing system ; developmental test; multimedia distance learning platform; interactive video; graphics; BRI ISDN lines
Class Codes: B6210M (ISDN); B6210P (Teleconferencing); B0120 (Education and training)

12/5/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

03219206 INSPEC Abstract Number: B88059840, C88052166
Title: Videomatic switching: systems and services
Author(s): Crawford, C.; Milone, F.; Zoppellaro, D.
Author Affiliation: Italtel SIT, Milan, Italy
Conference Title: 1988 International Zurich Seminar on Digital Communications: Mapping New Applications onto New Technologies (Cat. No.88TH0202-2) p.37-43
Editor(s): Plattner, B.; Gunzburger, P.
Publisher: IEEE, Zurich, Switzerland
Publication Date: 1988 Country of Publication: Switzerland 266 pp.
ISBN: 3 908265 01 0
Conference Sponsor: IEEE; Assoc. Elettrotecnica Elettronica Italiana; Convention Nat. Soc. Electr. Eng. Western Eur.; et al
Conference Date: 8-10 March 1988 Conference Location: Zurich, Switzerland
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: An overview is provided of the trends in videomatic services and systems now coming into being with the advent of ISDN (integrated-services digital networks) and the prospect of broadband ISDN. Service aspects are discussed, including *****videoconferencing***** , videocoding, and videotelephony, and the *****LVX***** (*****local***** *****video***** *****exchange*****) system, an integrated *****video*****-*****voice*****-*****data***** local area network, is described from implementation and technical standpoints. (6 Refs)

Descriptors: broadband networks; encoding; ISDN; local area networks; *****teleconferencing*****; videotelephony
Identifiers: videomatic switching; videomatic systems; videomatic services; integrated-services digital networks; broadband ISDN; *****local***** *****video***** *****exchange*****; integrated *****video*****-*****voice*****-*****data***** local area network
Class Codes: B6210D (Telephony); B6210L (Computer communications); B6210M (ISDN); B6210P (Teleconferencing); C5620L (Local area networks); C7410F (Communications)

12/5/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

02258421 INSPEC Abstract Number: B84032996
Title: A *****videoconference***** terminal with multipoint capability
Author(s): Chiariglione, L.; Corgnier, L.
Author Affiliation: Centro Studi e Lab. Telecomunicazioni SpA, Torino, Italy
Conference Title: GLOBECOM '83. IEEE Global Telecommunications Conference. Conference Record p.562-6 vol.1
Publisher: IEEE, New York, NY, USA
Publication Date: 1983 Country of Publication: USA 3 vol. (xx+1675) pp.
U.S. Copyright Clearance Center Code: CH1956-2/83/0000-0562$01.00
Conference Sponsor: IEEE
Conference Date: 28 Nov.-1 Dec. 1983 Conference Location: San Diego, CA, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: An integrated terminal for transmission of *****video*****, *****voice*****, *****data*****, facsimile, still pictures and telewriting is considered. The discussion covers the structure of the terminal, coding methods, signaling technique, and multiplexing. (8 Refs)
Descriptors: encoding; multiplexing; signalling (telecommunication networks); *****teleconferencing*****
Identifiers: video transmission; voice transmission; data transmission; still picture transmission; *****videoconference***** terminal; multipoint capability; integrated terminal; facsimile; telewriting; coding methods; signaling technique; multiplexing
Class Codes: B6210D (Telephony); B6210P (Teleconferencing); B6430J (Applications of television systems)

12/5/5 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS

333301 NTIS Accession Number: N73-20889
Study of Information Transfer Optimization for Communication Satellites (Final Repor)
Odenwalder, J. P. ; Viterbi, A. J. ; Jacobs, I. M. ; Heller, J. A.
Linkabit Corp., San Diego, Calif.
Report No.: NASA-CR-114561
3 Jan 73 112p
Journal Announcement: GRAI7313; STAR1111
NTIS Prices: PC E05/MF A01
Contract No.: NAS2-6810
The results are presented of a study of source coding, modulation/channel

coding, and systems techniques for application to teleconferencing over high data rate digital communication satellite links. Simultaneous transmission of video, voice, data, and/or graphics is possible in various teleconferencing modes and one-way, two-way, and broadcast modes are considered. A satellite channel model including filters, limiter, a TWT, detectors, and an optimized equalizer is treated in detail. A complete analysis is presented for one set of system assumptions which exclude nonlinear gain and phase distortion in the TWT. Modulation, demodulation, and channel coding are considered, based on an additive white Gaussian noise channel model which is an idealization of an equalized channel. Source coding with emphasis on video data compression is reviewed, and the experimental facility utilized to test promising techniques is fully described. (Author)

Descriptors: *Coding; *Communication satellites; *Data links; *Telecommunication; Ground support equipment; Modulation; Pulse communication; Video communication; Voice communication

Identifiers: NTISNASA

Section Headings: 9D (Electronics and Electrical Engineering--Information Theory); 62E (Computers, Control, and Information Theory--Information Theory)

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Set     Items   Description
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             IDEOTELECONFERENC?
S2      10862   S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-
             25)
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S4 38 S2 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S5 107 S1 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR CHANNEL?)
S6 69 S2 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR CHANNEL?)
S7 65 S2 AND ((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?)) AND (-NETWORK?(N10)(AUDIO OR VIDEO)))
S8 0 S3 AND S4 AND S6 AND S7
S9 0 S3 AND S4 AND S6
S10 0 S3 AND S6 AND S7
S11 0 S3 AND (S4 OR S6 OR S7)
S12 5 RD S3 (unique items)
S13 0 S4 AND S6 AND S7
S14 2 S4 AND (S6 OR S7)
S15 2 RD S14 (unique items)

15/5/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

02342770 INSPEC Abstract Number: B84061101
Title: Conferences via satellite: from continent to continent
Author(s): Kukan, A.
Journal: Funkschau no.13 p.44-5
Publication Date: 22 June 1984 Country of Publication: West Germany
CODEN: FUSHA2 ISSN: 0016-2841
Language: German Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: After the Telecom '83 in Geneva, long distance conferencing took off in the USA. Video *****Teleconferencing***** Systems ('VTS') are now in operation in 42 American cities. A list of 7 organisations, including Bell Labs., Western Union and American Satellite Corp., and of their services is given. Europe will no doubt follow, transatlantic links via satellites being of main attraction. A brief summary of technical standards is included: NTSC in the USA with a *****transmission***** rate of 1.544 Mbit/s; *****PAL***** in Europe with 2.048 Mbit/s. Other matters considered are variable bandwidth *****channels*****, *****multiple***** access and all-digital *****transmission*****. (0 Refs)
Descriptors: satellite relay systems; *****teleconferencing*****
Identifiers: video *****teleconferencing***** systems; satellite communications; NTSC 1.544 Mbit/s rate; PAL 2.048 Mbit/s rate; transatlantic links; technical standards
Class Codes: B6210D (Telephony); B6210P (Teleconferencing); B6250G (Satellite relay systems); B6430J (Applications of television systems)

15/5/2 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03081327 E.I. Monthly No: EIM9106-029285
Title: *****Video***** quality gradient measures for digital *****networks*****.
Author: Quincy, Edmund A.
Corporate Source: US Dept of Commerce, Boulder, CO, USA
Conference Title: 1990 IEEE Military Communications Conference - MILCOM 90 Part 1 (of 3)

Conference Location: Monterey, CA, USA Conference Date: 19900930
Sponsor: IEEE Communications Soc; Armed Forces Communications & Electronics Assoc; US Dept of Defense
E.I. Conference No.: 14593
Source: Proceedings - IEEE Military Communications Conference. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA (IEEE cat n 90CH2831-6). p 289-296
Publication Year: 1990
CODEN: PMICET
Language: English
Document Type: PA; (Conference Paper) Treatment: T; (Theoretical); A; (Applications); X; (Experimental)
Journal Announcement: 9106
Abstract: Two of the most significant video quality degradations produced by digital compression in codecs are image blurring and distortion of edges in areas of motion. These degradations become more evident at reduced transmission rates. Two objective measures of video quality, one based on Laplacian and the other on Sobel gradient operators, are proposed. They are validated with desktop *****video***** *****teleconferencing***** (VTC) *****data***** for *****digital***** *****networks***** with sequences containing significant motion and complex detail. The measured results are compared over a range of transmission bit rates. The sensitivity and reliability of the measures are enhanced by determining the optimum Gray-level thresholds for computing the measures. Both measures correlate well with transmission rate and subjective opinion of the video quality, particularly for blurring. Measures were averaged over a consistent sequence of eight frames of desktop VTC corresponding to 0.133 s of viewing time. These measures provide nearly equal sensitivity to image degradation as compression is increasing for lowering *****transmission***** rates from 1536 kb/s to 384 kb/s. However, for *****NTSC***** images with increased detail, the Laplacian measure is 27% more sensitive than the Sobel measure. Consequently, at *****transmission***** rates greater than 1536 kb/s, the Laplacian measure may provide more quality discrimination. The Laplacian measure gives more emphasis to Gray-level detail while the Sobel measure emphasizes edges more. This difference in emphasis may dictate a preference for one measure over the other in certain applications, or weightings when combined in an objective classification scheme. For example, technical drawings with many lines might dictate the need for edge emphasis, while scenes with many people and background detail may require emphasis on the Gray-level content. 12 Refs.
Descriptors: SIGNAL PROCESSING--*Video Signals; *****TELECONFERENCING*****; IMAGE PROCESSING--Image Coding
Identifiers: *****VIDEO***** QUALITY GRADIENT MEASURES; DIGITAL *****NETWORKS*****; LAPLACIAL GRADIENT OPERATOR; SOBEL GRADIENT OPERATOR; IMAGE COMPRESSION; CODECS
Classification Codes:
716 (Radar, Radio & TV Electronic Equipment); 718 (Telephone & Line Communications); 741 (Optics & Optical Devices)
71 (ELECTRONICS & COMMUNICATIONS); 74 (OPTICAL TECHNOLOGY)

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         (c)format only 1996 Knight-Ridder Info
File 109:Nuclear Sci. Abs. 1948-1976
         (c)format only 1995 Knight-Ridder Info
File 108:Aerospace Database 1962-1996/Oct
         (c) 1996 AIAA
File 144:Pascal 1973-1996/Sep
         (c) 1996 INIST/CNRS.
File  94:JICST-EPlus 1985-1996/Sep W5
         (c)1996 Japan Science and Tech Corp(JST)
File  37:Sociological Abstr. 1963-1996/Oct
         (c) 1996 Sociological Abstracts Inc
File  49:PAIS INT. 1976-1996/SEP
         (c) 1996 Public Affairs Information Service
File  93:US Political Science Documents 1975-1994/Dec
File 434:Scisearch(R) Cited Ref Sci 1974-1996/Oct W2
         (c) 1996 Inst for Sci Info
File   7:Social SciSearch(R) 1972-1996/Oct W3
         (c) 1996 Inst for Sci Info
File 439:Arts&Humanities Search(R) 1980-1996/Oct W3
         (c) 1996 Inst for Sci Info

Set     Items   Description
S1      15052   (TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR
             TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-
             IDEOTELECONFERENC?
S2      10862   S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-
             25)
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S3          10   S2 AND (VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHANG-
               ?)
S4          38   S2 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL
               OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S5         107   S1 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR
               CHANNEL?)
S6          69   S2 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR
               CHANNEL?)
S7          65   S2 AND ((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?)) AND (-
               NETWORK?(N10)(AUDIO OR VIDEO)))
S8           0   S3 AND S4 AND S6 AND S7
S9           0   S3 AND S4 AND S6
S10          0   S3 AND S6 AND S7
S11          0   S3 AND (S4 OR S6 OR S7)
S12          5   RD S3 (unique items)
S13          0   S4 AND S6 AND S7
S14          2   S4 AND (S6 OR S7)
S15          2   RD S14 (unique items)
S16         36   S4 NOT (S3 OR S14)
S17         27   RD S16 (unique items)

 17/5/1     (Item 1 from file: 2)
DIALOG(R)File   2:INSPEC
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04261557   INSPEC Abstract Number: B9212-6220-001
 Title: Video codec NWT-200
  Author(s):  Okano, K.; Hirano, I.; Abe, K.; Okano, T.; Oguma, H.; Ishida,
H.
  Journal: JRC Review    no.31    p.10-14
  Publication Date: 1992    Country of Publication: Japan
  CODEN: NMGIDE  ISSN: 0287-1564
  Language: Japanese    Document Type: Journal Paper (JP)
  Treatment: Practical (P); Product Review (R)
  Abstract:  Describes the NWT-200, a new model of motion video codec which
has    been    developed    for    compressing    and    *****transmitting*****
*****NTSC***** video signals at 384 kbps to 1.5 Mbps. The codec conforms to
the  CCITT  standard  H.261  and employs a number of advanced digital video
processing  techniques.  The  standard  is based on high-compression coding
algorithms  as  follows:  motion  compensation,  predictive  coding,  DCT,
(discrete  cosine  transform),  variable  length  coding, BCH forward error
correction  coding,  and  so  on.  To transmit higher-quality pictures, the
codec adopts the three-dimensional Y/C separation and the motion estimation
in  the  maximum  specified  search  area.  The  video  codec  is  used for
monitoring      and      *****videoconferencing*****      through      digital
telecommunication networks.  (2 Refs)
  Descriptors: codecs; encoding; picture processing;
*****teleconferencing*****; television standards; video equipment
  Identifiers: NWT-200; motion video codec; NTSC video signals; CCITT
standard H.261; digital video processing; motion compensation; predictive
coding; DCT; discrete cosine transform; variable length coding; BCH forward
error correction coding; three-dimensional Y/C separation; motion
estimation; monitoring; *****videoconferencing*****; digital
telecommunication networks; 384 kbit/s to 1.5 Mbit/s
  Class Codes: B6220  (Stations and subscriber equipment); B6430  (
Television equipment, systems and applications); B6420  (Radio and
television broadcasting); B6140C (Optical information and image processing)
; B6120B (Codes)
  Numerical Indexing: bit rate 3.84E+05 to 1.5E+06 bit/s
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17/5/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

03932143 INSPEC Abstract Number: B91052564
Title: Developed image transmission network service: business television by communication satellite
Author(s): Hashimoto, K.
Author Affiliation: Japan Commun. Satellite Co. Inc., Tokyo, Japan
Journal: Journal of the Institute of Television Engineers of Japan vol.45, no.1 p.27-30
Publication Date: Jan. 1991 Country of Publication: Japan
CODEN: JITJA7 ISSN: 0386-6831
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Applications (A); Practical (P)
Abstract: Needs addressed by business television networks are internal training, TV conferences, and information transmission. One commercial educational use is that of cram school class transmission to the home or local centre. Satellite news gathering is widely used and employs very small aperture terminals. Currently used image *****transmission***** technology is reviewed. Image scrambling *****NTSC*****/PCM using COATEC, M systems and skyport are outlined. (0 Refs)
Descriptors: education; electronic news gathering; satellite relay systems; telecommunication services; *****teleconferencing*****; television broadcasting; television networks; training
Identifiers: image scrambling; education; satellite news gathering; image transmission network service; communication satellite; business television networks; training; TV conferences; information transmission; home; local centre; very small aperture terminals; NTSC/PCM; COATEC; M systems; skyport
Class Codes: B6420 (Radio and television broadcasting); B6250G (Satellite relay systems); B6210P (Teleconferencing); B6430J (Applications of television systems); B0120 (Education and training); B6430B (Electronic news gathering)

17/5/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

03805703 INSPEC Abstract Number: B91011984
Title: Terminal method wide-band radio system insusceptible to rain
Author(s): Ono, K.; Shinoda, T.
Journal: KDD Technical Journal no.3 p.41-3
Publication Date: Autumn 1990 Country of Publication: Japan
CODEN: KTNKAY ISSN: 0452-3431
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: The authors describe a KDD developed local distribution radio system useful in time of disasters, providing a good quality, high-speed, versatile service. It has two types of services, digital and analog, the former *****transmits***** a 1984 kbit/s max. signal and is used for the international stereo voice *****transmission***** and personal-line service, while the latter *****transmits***** a voice and video signal channel of *****NTSC***** type and is used for the international television conference service. The *****transmission***** path configuration employed in the system is illustrated. (0 Refs)
Descriptors: digital radio systems; radio networks; *****teleconferencing*****; video signals; visual communication; voice communication

Identifiers: wide-band radio system; KDD developed local distribution radio system; international stereo voice transmission; personal-line service; international television conference service; 1984 kbit/s
Class Codes: B6250D (Point-to-point radio systems); B6430 (Television equipment, systems and applications)
Numerical Indexing: bit rate 1.984E+06 bit/s

17/5/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

03652824 INSPEC Abstract Number: B90046175
Title: Color video codec
Author(s): Okano, K.; Hirano, I.; Oguma, H.; Abe, K.; Itoh, K.
Journal: JRC Review no.28 p.23-6
Publication Date: 1990 Country of Publication: Japan
CODEN: NMGIDE ISSN: 0287-1564
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Applications (A); Practical (P); Product Review (R)
Abstract: Along with the recent advances of digital transmission networks and image bandwidth compression techniques, demand is increasing rapidly for digital radio transmission of color moving images in the ITV (industrial television) and *****videoconference***** fields. To meet this demand, JRC has developed a color video codec for *****transmitting***** *****NTSC***** TV signals at 1.5 Mbits/s and 6.3 Mbits/s. This codec employs the motion-compensated coding by adaptive interframe prediction. The new color video codec is described. (3 Refs)
Descriptors: codecs; colour television; digital communication systems; video equipment; video signals
Identifiers: digital transmission networks; image bandwidth compression; digital radio transmission; color moving images; industrial television; *****videoconference*****; JRC; NTSC TV signals; motion-compensated coding; adaptive interframe prediction; 1.5 Mbit/s; 6.3 Mbit/s
Class Codes: B6220 (Stations and equipment); B6430 (Television equipment, systems and applications); B6210 (Telecommunication applications)
Numerical Indexing: bit rate 1.5E+06 bit/s; bit rate 6.3E+06 bit/s

17/5/5 (Item 5 from file: 2)
DIALOG(R)File 2:INSPEC

03435440 INSPEC Abstract Number: B89057293
Title: High efficiency 384 kbit/s coding equipment for TV conferencing
Author(s): Hatori, Y.; Koike, J.; Kaneko, T.
Journal: KDD Technical Journal no.136 p.87-94
Publication Date: April 1988 Country of Publication: Japan
CODEN: KTNKAY ISSN: 0452-3431
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: A coding system to meet the CCITT 1988 standard of 384 kbit/s with six voice channels, image and data *****transmission***** has been developed. Hierarchy *****transmission***** speeds fall into three groups and differ for *****PAL*****/SECAM and *****NTSC***** and the common intermediate format of CCITT SG XV is shown. Frame structure consists of 64 kbit/s devoted to sound and service (frame synchronisation FAS and bit address BAS) and 5*384 kbit/s video (option data) channels. Results of joint KDD/NTT tests are described. (9 Refs)

Descriptors: encoding; standards; *****teleconferencing*****
Identifiers: video channels; *****teleconferencing*****; coding system; CCITT 1988 standard; voice channels; image; data; PAL/SECAM; NTSC; frame synchronisation; bit address; 384 kbit/s; 64 kbit/s
Class Codes: B6210P (Teleconferencing)
Numerical Indexing: bit rate 3.84E+05 bit/s; bit rate 6.4E+04 bit/s

17/5/6 (Item 6 from file: 2)
DIALOG(R)File 2:INSPEC

03235348 INSPEC Abstract Number: B88067180
Title: A broadband switching experiment
Author(s): Briley, B.E.; Tokar, J.V.
Author Affiliation: AT&T Bell Labs., Naperville, IL, USA
Journal: International Journal of Digital and Analog Cabled Systems vol.1, no.2 p.73-6
Publication Date: April-June 1988 Country of Publication: UK
CODEN: IJDSEM ISSN: 0894-3222
U.S. Copyright Clearance Center Code: 0894-3222/88/020073-04$05.00
Language: English Document Type: Journal Paper (JP)
Treatment: Applications (A); Practical (P)
Abstract: A broadband switching experiment was presented at the ISS'87 and Telecom'87 conferences in Phoenix, Arizona, and Geneva, Switzerland, respectively and at the March 1988 Fair in Hanover, West Germany. This experiment was significant in that it illustrated techniques for switching broadband signals with a wide range of frequencies, formats and ultimate purposes. In particular, simultaneous switching (within the same switch fabric) of 30 MHz PFM, 45 Mb/s PCM, and 140 Mb/s PCM was demonstrated. These signals carried full-motion, full-colour *****NTSC***** video for desk-to-desk video *****teleconferencing*****, off-the-air *****broadcast***** video programming, and surveillance camera video. They also carried RGB video, digitized stored video images, and computer-computer communications. Software features afforded a friendly human interface, allowing multiple, flexible service capabilities. Further, the experimental system, when deployed in Phoenix, demonstrated control of its capabilities via a narrowband ISDN link to an optically remoted 5ESS switch module one km distant, which homed in on a 5ESS host switch about 32 km further away. The technologies employed in the switch and the surrounding equipment are detailed, and the significance of this experiment relative to the broadband ISDN (BISDN) thinking is discussed. (6 Refs)
Descriptors: broadband networks; computer networks; electronic switching systems; ISDN; *****teleconferencing*****; television applications; television cameras; video signals
Identifiers: full motion full colour NTSC video; multiple flexible service capabilities; broadband switching experiment; simultaneous switching; PCM; desk-to-desk video *****teleconferencing*****; off-the-air broadcast video programming; surveillance camera video; RGB video; digitized stored video images; computer-computer communications; friendly human interface; narrowband ISDN link; optically remoted 5ESS switch module ; broadband ISDN; BISDN; 30 MHz; 45 Mbit/s; 140 Mbit/s; 1 km; 33 km
Class Codes: B6210M (ISDN); B6210P (Teleconferencing); B6230B (Electronic telephone exchanges); B6430 (Television equipment, systems and applications); B6430J (Applications of television systems)
Numerical Indexing: frequency 3.0E+07 Hz; bit rate 4.5E+07 bit/s; bit rate 1.4E+08 bit/s; distance 1.0E+03 m; distance 3.3E+04 m

17/5/7 (Item 7 from file: 2)

DIALOG(R)File 2:INSPEC

03016777 INSPEC Abstract Number: B87077030
Title: The MVC-3000 series of video codecs
Author(s): Kubo, T.; Imamura, T.; Kamizawa, K.; Asai, K.; Murakami, T.
Journal: Mitsubishi Denki Giho vol.60, no.12 p.61-6
Publication Date: 1986 Country of Publication: Japan
CODEN: MTDNAF ISSN: 0369-2302
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Introduces the newly marketed MVC-3000 series of video codecs and their dynamic multistep vector-quantization technology. The codes feature transmission speeds of 56/64 kbps to 384 kbps with switching in steps of 64 kbps. They are compatible with both *****NTSC***** and *****PAL***** equipment standards, and can multiplex and *****transmit***** audio and data signals as well as high-resolution still images. The series represents the state of the art in *****teleconferencing***** equipment, and a wide variety of other applications is also envisioned. (0 Refs)
Descriptors: codecs; *****teleconferencing*****; video signals
Identifiers: MVC-3000; video codecs; dynamic multistep vector-quantization technology; NTSC; PAL; audio; data signals; high-resolution still images; *****teleconferencing***** equipment; 56 to 384 kbits/s
Class Codes: B6430J (Applications of television systems)
Numerical Indexing: bit rate 5.6E+04 to 3.84E+05 bit/s

17/5/8 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC

02929801 INSPEC Abstract Number: B87048730, C87041359
Title: Video codecs send full-motion CGA images over the phone
Author(s): Cormier, D.
Journal: ESD: The Electronic System Design Magazine vol.17, no.4 p. 93-5
Publication Date: April 1987 Country of Publication: USA
CODEN: EESMEY ISSN: 0147-9245
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Advances in high-speed analog-to-digital converter chips coupled with high-performance microprocessors are providing the basis for production of commercial video codecs. Video codecs can compress standard CGA or color television signals (*****PAL***** and *****NTSC*****) to *****transmit***** on digital phone lines with bandwidths as narrow as 56 kbits/sec. They can also *****transmit***** freeze-frame images over 3-kHz dial-up lines. Applications are widespread, and include *****teleconferencing***** , remote ATE, assembly-line monitoring and the state of developments in the field is outlined. (0 Refs)
Descriptors: codecs; computerised picture processing; data communication equipment; digital communication systems; *****teleconferencing*****; video signals
Identifiers: data compression; full-motion CGA images; video codecs; digital phone lines; dial-up lines; 56 kbit/s; 3 kHz
Class Codes: B6210D (Telephony); B6210P (Teleconferencing); B6220 (Stations and equipment); C5260 (Digital signal processing); C5630 (Networking equipment)
Numerical Indexing: bit rate 5.6E+04 bit/s; frequency 3.0E+03 Hz

17/5/9 (Item 9 from file: 2)
DIALOG(R)File 2:INSPEC

02923834 INSPEC Abstract Number: B87049287
Title: Speech and video compression. Transmitting video signals at 2 Mbit/s
Journal: Communications International vol.14, no.1 p.40, 42
Publication Date: Jan. 1987 Country of Publication: UK
CODEN: CINTDZ ISSN: 0305-2109
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: For the digital PCM *****transmission***** of full motion colour pictures (e.g. TV *****transmission***** in *****PAL*****) it is necessary to go up to high bit rates of around 140 Mbit/s, which conforms to the 4th PCM-hierarchy level in Europe (CCITT). Unfortunately, there are no communication networks for digital signals worldwide that have this capacity. Compression techniques are needed. To achieve national or international connections for *****video***** *****conferencing***** , Philips Kommunikations Industrie developed the 2 Mbit/s *****videoconference***** codec VCD 2M. Manufacturers in France, Italy, and UK have also developed compatible equipment in association with the national PTTs. The codec operates with data reduction algorithms for video signals as standardised by COST 211 (CCITT) in 1984. The aim was production of a range of codecs capable of interoperating with each other in an international *****videoconference***** network. (0 Refs)
Descriptors: data compression; digital communication systems; *****teleconferencing*****; television equipment; video signals
Identifiers: speech compression; video compression; video signals; digital PCM transmission; full motion colour pictures; TV transmission; PAL ; CCITT; international connections; *****video***** *****conferencing*****; Philips Kommunikations Industrie; *****videoconference***** codec; VCD 2M; data reduction algorithms; 2 Mbit/s; 140 Mbit/s
Class Codes: B6140 (Signal processing and detection); B6210D (Telephony) ; B6210P (Teleconferencing); B6430 (Television equipment, systems and applications); B6430J (Applications of television systems)
Numerical Indexing: bit rate 2.0E+06 bit/s; bit rate 1.4E+08 bit/s

17/5/10 (Item 10 from file: 2)
DIALOG(R)File 2:INSPEC

02515559 INSPEC Abstract Number: B85051708
Title: NTSC TV scan conversion using motion adaptive processings
Author(s): Suzuki, N.; Mitsuhashi, K.; Niwa, K.; Fujimura, R.; Morishita, M.; Iwaibana, K.; Hayashi, H.
Author Affiliation: Transmission Div., NEC Corp., Tokyo, Japan
Journal: NEC Research and Development no.77 p.38-44
Publication Date: April 1985 Country of Publication: Japan
CODEN: NECRAU ISSN: 0547-051X
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P); Theoretical (T); Experimental (X)
Abstract: Describes a picture enhancement scheme through digital signal processing at a TV receiver. Implementing the scheme requires no change in the existing TV *****broadcasting***** system, and thus is considered to be a realistic approach to better quality TV. An experimental *****NTSC***** TV receiver has been developed, which employs motion-adaptive processing in order to realize the best picture quality attainable from the current

broadcasting signal. Subjective evaluation has proven that motion-adaptive processing is effective for picture improvement. The processed picture has fine resolution, and is free from such impairments as large area flicker, line flicker, dot crawl, pairing and cross color. The picture enhancement technologies presented will find extensive application areas, including multi-function digital TV and large screen projection TV for *****videoconference***** systems. (8 Refs)
Descriptors: colour television receivers; picture processing
Identifiers: picture processing; HDTV; NTSC TV scan conversion; color TV; motion adaptive processings; picture enhancement; digital signal processing ; TV receiver; TV broadcasting system; picture quality; broadcasting signal ; digital TV; large screen projection TV; *****videoconference***** systems
Class Codes: B6140C (Optical information processing); B6420D (Radio and television receivers)

17/5/11 (Item 11 from file: 2)
DIALOG(R)File 2:INSPEC

02514465 INSPEC Abstract Number: B85052558
Title: Bandwidth reduction technology for video transmission-intraframe and interframe codecs
Author(s): Yamashita, M.
Author Affiliation: NTT, Tokyo, Japan
Journal: Japan Telecommunications Review vol.27, no.1 p.41-8
Publication Date: Jan. 1985 Country of Publication: Japan
CODEN: JTCRAN ISSN: 0021-4744
Language: English Document Type: Journal Paper (JP)
Treatment: Applications (A); Theoretical (T)
Abstract: Describes an intraframe codec (VC-32M CODEC) and an interframe codec (VC-6M CODEC) which have been developed for long-distance ITV (industrial television) and *****teleconference***** services. The VC-32M CODEC *****transmits***** *****NTSC***** television signals at a 32 Mbit/s rate and the VC-6M CODEC *****transmits***** them at a 6.3 Mbits/s rate. For cost reduction, miniaturization, and improvement in video signal quality, NTT employed LSI technology and a new predictive coding algorithm, and realized an economical and miniaturized predictive coding circuit using LSIs. (0 Refs)
Descriptors: bandwidth compression; codecs; filtering and prediction theory; *****teleconferencing*****; video signals
Identifiers: bandwidth reduction technology; video transmission; interframe codecs; intraframe codec; VC-32M CODEC; VC-6M CODEC; long-distance ITV; industrial television; *****teleconference***** services ; NTSC television signals; 32 Mbit/s; 6.3 Mbits/s rate; cost reduction; miniaturization; LSI technology; predictive coding
Class Codes: B6140 (Signal processing and detection); B6430J (Applications of television systems)

17/5/12 (Item 12 from file: 2)
DIALOG(R)File 2:INSPEC

02446351 INSPEC Abstract Number: B85031224
Title: A 1.5 Mb/s interframe codec for video *****teleconferencing*****
Author(s): Kuroda, H.; Mukawa, N.; Hashimoto, H.; Taka, M.
Author Affiliation: NTT, Tokyo, Japan
Journal: Electrical Communication Laboratories Technical Journal vol.33, no.11 p.2717-30

Publication Date: 1984 Country of Publication: Japan
CODEN: TJECAS ISSN: 0415-3200
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Applications (A); Practical (P)
Abstract: Describes an interframe codec developed for *****transmitting***** *****NTSC***** television signals and 7 KHz bandwidth audio signals at a rate of 1.5 Mb/s. Two types of codecs are presented. One is an analog signal input type, and the other is a 32 Mb/s intra-frame coded data input type. The coding method for video signals involves adaptive employment of previous-frame prediction, motion-compensation prediction, and uncovered-background prediction. Subband coding, in which adaptive predictive ADPCM is applied to both lower (0-4 kHz) and higher bands (4-7 kHz), is used for broadband speech signals. The developed speech coding scheme gives high audio signal quality for *****video***** *****conferencing*****. (19 Refs)
Descriptors: codecs; encoding; speech analysis and processing; *****teleconferencing*****; video signals
Identifiers: 1.5 Mb/s codec; NTSC TV signals; motion-compensation prediction; video *****teleconferencing*****; 7 KHz bandwidth audio signals ; analog signal; coding method; previous-frame prediction; uncovered-background prediction; adaptive predictive ADPCM; broadband speech signals; speech coding; audio signal quality
Class Codes: B6120B (Codes); B6210D (Telephony); B6210P (Teleconferencing); B6220 (Stations and equipment); B6430J (Applications of television systems)

17/5/13 (Item 13 from file: 2)
DIALOG(R)File 2:INSPEC

02392068 INSPEC Abstract Number: B85014505
Title: TRIDEC 6.3: a 6.3-Mbit/s interframe coding system for video *****teleconferencing*****
Author(s): Mukawa, N.; Kuroda, H.; Okubo, S.
Author Affiliation: Electr. Commun. Labs., NTT, Tokyo, Japan
Journal: Review of the Electrical Communication Laboratories vol.32, no.5 p.813-20
Publication Date: Sept. 1984 Country of Publication: Japan
CODEN: RELTAN ISSN: 0029-067X
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P); Theoretical (T)
Abstract: Describes the TRIDEC 6.3, an interframe coding system which was developed for *****transmitting***** *****NTSC***** television signals at 6.3 Mbit/s. The TRIDEC 6.3 uses, (1) interframe combinational difference coding, (2) temporal subsample coding, (3) block segmenting into 8 pels by 2 lines, and (4) demand refreshing to protect error propagation in decoded signals against channel errors. The subjective evaluation test results show that the decoded picture quality is sufficient for practical *****teleconferencing***** use. Mean opinion score (MOS) is at least 4.0 for scenes of conferees talking, while for scenes of conferees sitting and standing, MOS is 3.4. Experimental results also show that the TRIDEC 6.3 is not affected by channel errors when the error rate is lower than 10/sup -5/. (6 Refs)
Descriptors: encoding; *****teleconferencing*****; television reception; video signals
Identifiers: TRIDEC 6.3; 6.3-Mbit/s; interframe coding system; video *****teleconferencing*****; NTSC television signals; interframe combinational difference coding; temporal subsample coding; block segmenting; demand refreshing; error propagation; decoded signals; channel

errors; decoded picture quality
Class Codes: B6120B (Codes); B6210P (Teleconferencing); B6430J (Applications of television systems)

17/5/14 (Item 14 from file: 2)
DIALOG(R)File 2:INSPEC

02324689 INSPEC Abstract Number: B84053818
Title: Motion compensated predictive coding
Author(s): Kappagantula, S.; Rao, K.R.
Author Affiliation: Dept. of Electrical Engng., Univ. of Texas, Arlington, TX, USA
Journal: Proceedings of the SPIE - The International Society for Optical Engineering vol.432 p.64-70
Publication Date: 1983 Country of Publication: USA
CODEN: PSISDG ISSN: 0277-786X
Conference Title: Applications of Digital Image Processing VI
Conference Sponsor: SPIE
Conference Date: 23-26 Aug. 1983 Conference Location: San Diego, CA, USA
Language: English Document Type: Conference Paper (PA); Journal Paper (JP)
Treatment: Theoretical (T); Experimental (X)
Abstract: Interframe image coding techniques in real-time provide a very attractive scheme of reducing the bandwidth required for coding and transmitting natural video scenes. A modification of two existing algorithms for motion compensated interframe coding is proposed. It is shown that the modified method involves a reduced computational complexity while being compatible with the performance obtained by the previous algorithms. Implementation of the new algorithm is consequently simplified and a design for the hardware using a parallel processing approach is studied. The system is proposed for use in *****NTSC***** TV pictures for applications ranging from *****broadcast***** quality TV to video *****teleconferencing***** systems. (21 Refs)
Descriptors: encoding; picture processing
Identifiers: interframe image coding; motion compensated predictive coding; algorithms; parallel processing; NTSC TV; broadcast quality TV; video *****teleconferencing***** systems
Class Codes: B6120B (Codes); B6140C (Optical information processing); B6430 (Television equipment, systems and applications)

17/5/15 (Item 15 from file: 2)
DIALOG(R)File 2:INSPEC

02292130 INSPEC Abstract Number: B84044303
Title: A 1.5 Mbit/s interframe code for video *****teleconferencing***** signals (TRIDEC 1.5)
Author(s): Mukawa, N.; Kuroda, H.; Matsuoka, T.
Author Affiliation: NTT, Tokyo, Japan
Journal: Electrical Communication Laboratories Technical Journal vol.33, no.2 p.269-79
Publication Date: 1984 Country of Publication: Japan
CODEN: TJECAS ISSN: 0415-3200
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Applications (A); Practical (P); Experimental (X)
Abstract: Describes the interframe codec (TRIDEC 1.5) used for

*****NTSC***** color television signal *****transmission***** at a 1.5 Mbit/s rate. TRIDEC 1.5 utilizes the following highly efficient coding techniques: (1) Interframe combinational difference coding. (2) Temporal subsample coding. (3) Noise reduction. (4) Demand refreshing to protect against channel errors. In addition, new coding parameter control methods have been devised to improve the picture quality. Subjective evaluation test results show that the encoded picture quality is good enough for *****teleconferencing***** use. (13 Refs)
Descriptors: codecs; colour television; encoding; *****teleconferencing*****; television equipment; video signals
Identifiers: 1.5 Mbit/s interframe codec; NTSC; colour TV signal; temporal subsample coding; noise reduction; demand refreshing; video *****teleconferencing***** signals; TRIDEC 1.5; coding; combinational difference coding; coding parameter control methods; picture quality
Class Codes: B6120B (Codes); B6230 (Switching centres and equipment); B6430J (Applications of television systems)

17/5/16 (Item 16 from file: 2)
DIALOG(R)File 2:INSPEC

02275069 INSPEC Abstract Number: B84038886
Title: An interframe coding system for video *****teleconferencing***** signal transmission at a 1.5 Mbit/s rate
Author(s): Mukawa, N.; Kuroda, H.; Matsuoka, T.
Author Affiliation: Nippon Telegraph & Telephone Public Corp., Kanagawa-ken, Japan
Journal: IEEE Transactions on Communications vol.COM-32, no.3 p. 280-7
Publication Date: March 1984 Country of Publication: USA
CODEN: IECMBT ISSN: 0090-6778
U.S. Copyright Clearance Center Code: 0090-6778/84/0300-0280$01.00
Language: English Document Type: Journal Paper (JP)
Treatment: Applications (A); Experimental (X)
Abstract: The interframe coding system TRIDEC 1.5 used for *****NTSC***** color television signal *****transmission***** at a 1.5 Mbit/s rate is described. TRIDEC 1.5 is developed with the intention of making video *****teleconferencing***** service more economical. The system utilizes the following highly efficient coding techniques: (1) interframe combinational difference coding; (2) temporal subsample coding; (3) noise reduction; and (4) demand refreshing to protect against channel errors, which makes periodic forced refreshing unnecessary. In addition, new coding parameter control methods have been devised to prevent buffer memory overflow. The subjective evaluation test results make it clear that the encoded picture quality is good enough for *****teleconferencing***** use. (11 Refs)
Descriptors: colour television; encoding; picture processing; *****teleconferencing*****; video signals
Identifiers: NTSC; colour TV signal; TRIDEC system; interframe coding system; video *****teleconferencing*****; signal transmission; 1.5 Mbit/s; combinational difference coding; temporal subsample coding; noise reduction ; demand refreshing; coding parameter control; buffer memory; encoded picture quality
Class Codes: B6120B (Codes); B6140C (Optical information processing); B6430J (Applications of television systems)

17/5/17 (Item 17 from file: 2)
DIALOG(R)File 2:INSPEC

01423723 INSPEC Abstract Number: B79048942
Title: NETEC-6/3 video transmission equipment for *****teleconference*****
Author(s): Kaneko, H.; Iijima, Y.; Ishiguro, T.; Iinuma, K.
Author Affiliation: Nippon Electric Co. Ltd., Kawasaki, Japan
Conference Title: Intelcon 79 Exposition Proceedings p.579-82
Editor(s): Gershanoff, H.; Egan, D.B.
Publisher: Horizon House Internat, Dedham, MA, USA
Publication Date: 1979 Country of Publication: USA xvi+602 pp.
Conference Date: 26 Feb.-2 March 1979 Conference Location: Dallas, TX, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: NETEC-6/3 is a digital television *****transmission***** terminal, which encodes an *****NTSC***** color television signal into a low bit rate data of 3-6 Mbit/s, providing a means for visual communication and interactive graphical image communication through motion pictures. An audio signal and some digital data are also transmitted together with the video data. The bit rate reduction to about one-tenth compared with that of straight PCM is attained by using an interframe coding which transmits only significant differences between successive picture frames. Chrominance signals are processed digitally so that stable and accurate color reproduction can be made. A line interface is developed, which enables a parallel transmission over plural T1 (1.544 Mb/s) lines, for example, four T1 lines for 6 Mb/s, or two T1 for 3 Mb/s transmission. (5 Refs)
Descriptors: *****teleconferencing*****
Identifiers: NETEC-6/3 video transmission equipment; *****teleconference*****; digital; NTSC color
Class Codes: B6210D (Telephony); B6210P (Teleconferencing); B6430J (Applications of television systems)

17/5/18 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02264612 E.I. Monthly No: EIM8708-051862
Title: NTSC COMPOSITE CODING FOR *****VIDEO***** *****CONFERENCING***** SYSTEMS USING THE HADAMARD TRANSFORM.
Author: Colef, M.; Barba, J.; Scheinberg, N.; Feria, E.
Corporate Source: City Coll of New York, NY, USA
Conference Title: Sixth Annual International Phoenix Conference on Computers and Communications - 1987 Conference Proceedings.
Conference Location: Scottsdale, AZ, USA Conference Date: 19870225
Sponsor: IEEE, New York, NY, USA; IEEE Computer Soc, Los Alamitos, CA, USA; IEEE Communications Soc, New York, NY, USA; IEEE, Phoenix Section, Phoenix, AZ, USA; Arizona State Univ, Tempe, AZ, USA
E.I. Conference No.: 09774
Source: Conference Proceedings - Annual Phoenix Conference 6th. Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 87TH0179-2), Piscataway, NJ, USA p 183-187
Publication Year: 1987
CODEN: CPACE3 ISBN: 0-8186-0765-3
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8708
Abstract: A motion detection, estimation, and compensation algorithm is presented that operates on the component signals in the Hadamard transform domain and can be used for low bit-rate *****videoconferencing***** systems. The algorithm is based on the separation of the NTSC composite

signal into the Y,I,Q component signals when Hadamard transformed. The mapping of the dc energies in the Hadamard domain is used in the motion-compensation algorithm. The algorithm is shown to provide *****videoconferencing***** picture quality at bit rates of 54 kb/s, 84 kb/s, and 240 kb/s. 11 refs.
Descriptors: *****TELECONFERENCING*****; DIGITAL COMMUNICATION SYSTEMS; IMAGE PROCESSING; MATHEMATICAL TRANSFORMATIONS
Identifiers: HADAMARD TRANSFORM; COLOR IMAGE *****TRANSMISSION*****; *****NTSC***** COMPOSITE CODING; YIQ COMPONENT SIGNALS; MOTION DETECTION ALGORITHM
Classification Codes:
716 (Radar, Radio & TV Electronic Equipment); 718 (Telephone & Line Communications); 723 (Computer Software); 741 (Optics & Optical Devices)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 74 (OPTICAL TECHNOLOGY)

17/5/19 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01729693 E.I. Monthly No: EI8502014588 E.I. Yearly No: EI85117079
Title: 1. 5 Mbit/s INTERFRAME CODEC FOR VIDEO *****TELECONFERENCING***** SIGNALS (TRIDEC 1. 5).
Author: Mukawa, Naoki; Kuroda, Hideo; Matsuoka, Takeshi
Corporate Source: NTT, Jpn
Source: Denki Tsushin Kenkyusho Kenkyu Jitsuyoka Hokoku v 33 n 2 1984 p 269-279
Publication Year: 1984
CODEN: DTKKAA ISBN: 0-916877-00-0
Language: JAPANESE
Document Type: JA; (Journal Article) Treatment: A; (Applications)
Journal Announcement: 8502
Abstract: This paper describes the interframe codec (TRIDEC 1. 5) used for *****NTSC***** color television signal *****transmission***** at a 1. 5 Mbit/s rate. TRIDEC 1. 5 utilizes the following highly efficient coding techniques: (1) Interframe combinational difference coding. (2) Temporal subsample coding. (3) Noise reduction. (4) Demand refreshing to protect against channel errors. In addition, new coding parameter control methods have been devised to improve the picture quality. Subjective evaluation test results show that the encoded picture quality is good enough for *****teleconferencing***** use. 13 refs. In Japanese with English abstract.
Descriptors: *TELEVISION EQUIPMENT; TELEVISION TRANSMISSION; CODES, SYMBOLIC
Identifiers: INTERFRAME CODEC; VIDEO *****TELECONFERENCING*****; PICTURE QUALITY
Classification Codes:
716 (Radar, Radio & TV Electronic Equipment)
71 (ELECTRONICS & COMMUNICATIONS)

17/5/20 (Item 1 from file: 233)
DIALOG(R)File 233:Microcomputer Abstracts(TM)

0307579 93PK03-310
Digital cameras come into focus -- WTI, Logitech offer video, still-image tools
Schroeder, Erica
PC WEEK , March 22, 1993 , v10 n11 p14, 1 Page(s) ISSN: 0740-1604

Company Name: Logitech; Workstation Technologies
Product Name: PhotoMan
Languages: English
Document Type: Product Announcement
Geographic Location: United States
Reports that Irvine, CA-based Workstation Technologies Inc. (WTI) will introduce a digital camera ($160) designed for videoconferencing, while Logitech Inc. of Fremont, CA will release an upgraded PhotoMan ($799) digital camera for imaging needs. Says the WTI camera will be able to transmit signals in NTSC or PAL formats for electronic mail or network transmission, and e popular conversion standards. Also says the PhotoMan camera will offer 67% better resolution as well an increased battery life. (tbc)
Descriptors: Camera; Digital Video; Product Announcement; Peripherals ; Image Processing; Teleconferencing
Identifiers: PhotoMan; Logitech; Workstation Technologies

17/5/21 (Item 1 from file: 108)
DIALOG(R)File 108:Aerospace Database

01813329 A89-43121
Transportable ground stations for TV reporting
Transportable Bodenstationen fuer TV-Reportagen
REDER, HARALD
Dornier Post (ISSN 0012-5563), no. 3, 1988, p. 47-49. In German.
1988
LANGUAGE: German
COUNTRY OF ORIGIN: Germany COUNTRY OF PUBLICATION: Germany
DOCUMENT TYPE: JOURNAL ARTICLE; TRANSLATION
DOCUMENTS AVAILABLE FROM AIAA Technical Library
JOURNAL ANNOUNCEMENT: IAA8918
The design and operation of 11-14-GHz highly portable satellite terminals (HPSTs) are described and illustrated with diagrams and photographs. The HPSTs were developed with support from the FRG postal service for use by television journalists and for *****teleconferencing***** or digital communication. Major HPST components include a 1.5 x 1.5-m single-offset parabolic antenna with low-noise converter, a 275-W TWTA delivering EIRP of 69 dBW, and a TV reception unit with FM-TV modulator and control systems. The HPST is capable of analog TV *****transmission***** in *****PAL*****, SECAM, or *****NTSC***** format, with two audio signals on subcarriers; a trial *****transmission***** via Intelsat V-A F12 demonstrated rated S/N of 52.6 dB. The component cabinets permit outdoor operation and are small enough for transport on commercial airlines (length + width + height not greater than 2 m (T.K.)
SOURCE OF ABSTRACT/SUBFILE: AIAA
DESCRIPTORS: *GROUND STATIONS; *PARABOLIC ANTENNAS; *PULSE COMMUNICATION; *SATELLITE TELEVISION; *TELEVISION TRANSMISSION; COMMERCIAL AIRCRAFT; PORTABLE EQUIPMENT; WEST GERMANY
SUBJECT CLASSIFICATION: 8732 Communications & Radar (1987-)

17/5/22 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

02590897 PASCAL No.: 80-0319565
COMMERCIALIZED INTERFRAME CODEC FOR NTSC COLOR VIDEO SIGNALS
MIZUI M; INAMURA Y

YOKOSUKA ELECTR. COMMUN. LAB.,YOKOSUKA,JAPAN
Journal: JAP. TELECOMMUNIC. REV., 1979, 21 (2) 109-117
Availability: CNRS-10137
No. of Refs.: 6 REF.
Document Type: P (SERIAL) ; A (ANALYTIC)
Country of Publication: JAPAN
Language: ENGLISH

UN TEL CODEUR-DECODEUR APPELE VC-2F, PEUT EFFECTIVEMENT TRANSMETTRE UN SIGNAL NTSC A UNE VITESSE DE 6,312 MBIT/S QUI CORRESPOND AU SECOND ETAGE DE LA HIERARCHIE NUMERIQUE DE LA NTT. L'ALGORITHME DE CODAGE EST FONDE SUR LE CONCEPT DE DIFFERENCE DE COMBINAISON AVEC SUPPRESSION DE LA VALEUR ABSOLUE DE DIFFERENCE INTERTRAME. DE PLUS, ON UTILISE UN CODAGE DE MOT DE LONGUEUR VARIABLE ET UNE TECHNIQUE DE COMMANDE DE DEFINITION SPATIALE EN VUE DE SATISFAIRE A L'EXIGENCE D'UNE REDUCTION DE REDONDANCE EFFICACE SANS DEGRADATION DE QUALITE MARQUANTE. DES ESSAIS DU CODEUR ONT ETE REALISES DE NOVEMBRE 1978 A SEPTEMBRE 1979 POUR LE SYSTEME DE VISIO-CONFERENCE ENTRE TOKYO ET OSAKA. (CNET)

English Descriptors: APPLICATION; CODING CIRCUIT; DECODING CIRCUIT; CODING; *****NTSC*****-SYSTEM; *****TELECONFERENCE*****; TELEVISION; COLOR TELEVISION; DIGITAL TELEVISION; DIGITAL *****TRANSMISSION*****
English Generic Descriptors: ELECTRONICS; TELECOMMUNICATIONS

French Descriptors: TELEVISION; TELEVISION COULEUR; APPLICATION; CIRCUIT CODEUR; CIRCUIT DECODEUR; SYSTEME *****NTSC*****; *****TELECONFERENCE*****; *****TRANSMISSION NUMERIQUE*****; CODAGE; TELEVISION NUMERIQUE
French Generic Descriptors: ELECTRONIQUE; TELECOMMUNICATIONS

Classification Codes: 145B07O04B

17/5/23 (Item 2 from file: 144)
DIALOG(R)File 144:Pascal

01784326 PASCAL No.: 78-0036727
NETEC-6: INTERFRAME ENCODER FOR COLOR TELEVISION SIGNALS.
IINUMA K; IIJIMA Y; ISHIGURO T; KOGA T; TANAKA S; KANEKO H
Journal: N.E.C. RES. DEVELOP., 1977 (44) 92-96
Availability: CNRS-9584
No. of Refs.: 5 REF.
Document Type: P (SERIAL) ; A (ANALYTIC)
Country of Publication: JAPAN
Language: ENGLISH

LE CODEUR NETEC-6 (NIPPON ELECTRIC TELEVISION ENCODING AND BANDWITH COMPRESSION) TRANSMET DES SIGNAUX DE TELEVISION A 4 MHZ AVEC UN DEBIT DE 6 MBIT/S EN UTILISANT 4 CANAUX A 1,544 MBIT/S. UN SIGNAL DE TELEVISION MIC MULTIPLEXE PAR REPARTITION TEMPORELLE (SUITE DE SIGNAUX DE CHROMINANCE ET DE LUMINANCE COMPRIMES DANS LE TEMPS) SIMPLIFIE LE CODAGE DIFFERENTIEL ENTRE TRAMES. CELUI-CI EST FONDE SUR UN ALGORITHME DE RAFRAICHISSEMENT CONDITIONNEL DES TRAMES. DES ALGORITHMES DE COMMANDE ADAPTATIVE ASSURENT UNE QUALITE D'IMAGES ACCEPTABLE POUR VISIOPHONE ET *****TELECONFERENCE***** . (CNET)

English Descriptors: CODING; PASSBAND COMPRESSION; SIGNAL COMPRESSION; PULSE MODULATION; PULSE CODE MODULATION; *****NTSC*****-SYSTEM; COLOR TELEVISION; DIGITAL *****TRANSMISSION*****; VIDEOPHONE
English Generic Descriptors: ELECTRONICS; TELECOMMUNICATIONS

French Descriptors: TELEVISION COULEUR; *****TRANSMISSION***** NUMERIQUE; CODAGE; VISIOPHONE; COMPRESSION SIGNAL; COMPRESSION BANDE PASSANTE; MODULATION IMPULSION; SYSTEME *****NTSC*****; MODULATION IMPULSION CODAGE ; VISIOPHONE COULEUR; CONFERENCE TELEVISION; BANDE PASSANTE
French Generic Descriptors: ELECTRONIQUE; TELECOMMUNICATIONS

Classification Codes: 145B07004G

17/5/24 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

01628351 JICST ACCESSION NUMBER: 92A0662602 FILE SEGMENT: JICST-E
Video Codec NWT-200.
OKANO KAZUMI (1); HIRANO IKUYA (1); ABE KENJI (1); OKANO TOSHIO (1); OGUMA HIROSHI (1); ISHIDA HIKARU (1)
(1) Japan Radio Co., Ltd.
Nippon Musen Giho(JRC Review), 1992, NO.31, PAGE.10-14, FIG.10, TBL.2, REF.2
JOURNAL NUMBER: S0137AAD ISSN NO: 0287-1564
UNIVERSAL DECIMAL CLASSIFICATION: 621.397.004.14
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Commentary
MEDIA TYPE: Printed Publication
ABSTRACT: This paper describes the NWT-200, a new model of motion video codec which has been developed for compressing and *****transmitting***** *****NTSC***** video signals at 384kbps to 1.5Mbps bit rates. The codec conforms to the CCITT standard H. 261 and employs a number of advanced digital video processing techniques. The standard is based on high-compression coding algorithms as follows: motion compensation, predictive coding, DCT(Discrete Cosine Transform), variable length coding, BCH forward error correction coding, and so on. To transmit higher-quality pictures, the codec adopts the three-dimensional Y/C separation and the motion estimation in the maximum specified search area. The video codec is used for monitoring and *****videoconferencing***** through digital telecommunication networks. (author abst.)
DESCRIPTORS: NTSC; CCITT; CODEC; BCH code; moving image; picture communication; source coding; picture signal; image compression; predictive coding; variable length code; *****teleconference*****; communication monitoring; image quality; digital communication
BROADER DESCRIPTORS: color television; television; ITU; United Nations; international organization; signal converter; electric converter; converter; cyclic code; block code; code; image; telecommunication; coding(signal); modification; signal processing; treatment; signal; image processing; information processing; conference; monitoring; communication administration; management; image characteristic; characteristic; communication system; method
CLASSIFICATION CODE(S): ND12034M

17/5/25 (Item 2 from file: 94)
DIALOG(R)File 94:JICST-EPlus

01045910 JICST ACCESSION NUMBER: 90A0387612 FILE SEGMENT: JICST-E
Color video codec.

OKANO KAZUMI (1); HIRANO IKUYA (1); ITO KEIJIRO (1); OGUMA HIROSHI (2); ABE KENJI (2)
(1) Japan Radio Co., Ltd.; (2) Japan Radio Co., Ltd.
Nippon Musen Giho(JRC Review), 1990, NO.28, PAGE.23-26, FIG.8, TBL.1, REF.3
JOURNAL NUMBER: S0137AAD ISSN NO: 0287-1564
UNIVERSAL DECIMAL CLASSIFICATION: 621.394
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Commentary
MEDIA TYPE: Printed Publication
ABSTRACT: Along with the recent advances of digital transmission networks and image bandwidth compression techniques, a demand is increasing rapidly for digital radio transmission of color moving images in the ITV(industrial television) and *****videoconference***** fields. To meet this demand, JRC has developed a color video codec for *****transmitting***** *****NTSC***** TV signals at 1.5Mbits/s and 6.3Mbits/s. This codec employs the motion-compensated coding by adaptive interframe prediction. This paper describes the outline of the new color video codec. (author abst.)
DESCRIPTORS: color image; moving image; CODEC; image compression; digital communication; image correction; coding(signal); error correction; picture communication
BROADER DESCRIPTORS: image; signal converter; electric converter; converter ; image processing; information processing; treatment; communication system; method; correction(compensation); correction(modification); modification; signal processing; error control; control; telecommunication
CLASSIFICATION CODE(S): ND11050L

17/5/26 (Item 3 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00488320 JICST ACCESSION NUMBER: 87A0354582 FILE SEGMENT: JICST-E
1.5Mb/s interframe codec using motion compensation and adaptive prediction (TRIDEC1.5S).
KURODA HIDEO (1); MUKAWA NAOKI (1); HOSHINO RYOHEI (1); HASHIMOTO HIDEO (1)
(1) NTT Fukugotsushinken
NTT Denki Tsushin Kenkyujo Kenkyu Jitsuyoka Hokoku(Electrical Communication Laboratories Technical Journal), 1987, VOL.36,NO.4, PAGE.561-568, FIG.6, TBL.2, REF.4
JOURNAL NUMBER: F0137ABH ISSN NO: 0415-3200
UNIVERSAL DECIMAL CLASSIFICATION: 621.394
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
ABSTRACT: This paper describes the system configuration, design and characteristics of an interframe codec transmitting video signals at a rate of 1.544Mb/s. Its main features and specifications are based on CCITT recommendations, which apply to digital video *****transmissions***** at the digital primary rate, in accordance with *****NTSC***** TV standards. The key technologies employed in this codec are the motion compensation and adaptive prediction methods, are also defined in the CCITT recommendations. Other newly introduced technologies not defined by CCITT are capable of improving codec performance. A method for noise reduction of color signals preventing the dirty window phenomenon is proposed along with a motion estimation algorithm for rapid motion. Finally, transmission and conversion of synchronization for video signals making it possible to connect

directly between interframe codecs and intraframe codeces without loss of continuous video synchronization are also proposed. It is shown that this codec has high performance in the areas of picture quality and capability and, therefore, has wide applications.(author abst.)
DESCRIPTORS: CODEC; signal frame; predictive coding; *****teleconference*****; standardization; international standard; CCITT; signal sampling; pixel; chrominance signal; frequency control; image quality; image quantization
BROADER DESCRIPTORS: signal converter; electric converter; converter; coding(signal); modification; signal processing; treatment; conference; standard(specification); standard; ITU; United Nations; international organization; image; picture signal; signal; electric quantity control; control; image characteristic; characteristic; image processing; information processing; quantization
CLASSIFICATION CODE(S): ND11050L

17/5/27 (Item 4 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00420088 JICST ACCESSION NUMBER: 87A0143814 FILE SEGMENT: JICST-E
The MVC-3000 series of video codecs.
KUBO TSUTOMU (1); IMAMURA TSUNEHIRO (1); KAMIZAWA KO (2); ASAI KOTARO (2); MURAKAMI TOKUMICHI (2)
(1) Mitsubishi Electric Corp.; (2) Mitsubishidenki Johodenshiken
Mitsubishi Denki Giho, 1986, VOL.60,NO.12, PAGE.866-868, FIG.4, TBL.4, REF.2
JOURNAL NUMBER: F0198AAP ISSN NO: 0369-2302 CODEN: MTDNA
UNIVERSAL DECIMAL CLASSIFICATION: 621.397.13
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Commentary
ABSTRACT: The article introduces the newly marketed MVC-3000 series of video codecs and their dynamic multistep vector-quantization technology. The codes feature *****transmission***** speeds of 56/64Kbps to 384Kbps with switching in steps of 64Kbps. They are compatible with both *****NTSC***** and *****PAL***** equipment standards, and can multiplex and *****transmit***** audio and data signals as well as highresolution still images. The series represents the state of the art in *****teleconferencing***** equipment, and a wide variety of other applications is also envisioned.(author abst.)
DESCRIPTORS: *****teleconference*****; video telephone; moving image; transmission speed; exchange network; link connecting; vector quantization; sound multiplex; international communication; communication control; image quantization; image compression
BROADER DESCRIPTORS: conference; voice communication; telecommunication; picture communication; image; velocity; transmission characteristic; characteristic; communication network; information network; network; link operating; communication operation; operation(processing); connection; signal quantization; signal processing; treatment; quantization; modification; signal multiplex; multiplex; control; image processing; information processing
CLASSIFICATION CODE(S): ND12031N

File 2:INSPEC 1969-1996/Oct W3
(c) 1996 Institution of Electrical Engineers
File 8:Ei Compendex(R) 1970-1996/Nov W1
(c) 1996 Engineering Info. Inc.
File 14:Mechanical Engineering Abs 1973-1996/Nov
(c) 1996 Cambridge Sci Abs
File 233:Microcomputer Abstracts(TM) 81-1996/Oct
(c) 1996 Information Today,Inc
File 99:Wilson Appl. Sci & Tech Abs 1983-1996/Sep
(c) 1996 The HW Wilson Co.
File 142:Wilson Social Science Abs 1983-1996/Sep
(c) 1996 The HW Wilson Co
File 62:SPIN(R) 1975-1996/Oct B1
(c) 1996 American Institute of Physics
File 1:Eric 1966-1996/Sep
(c) format only 1996 Knight-Ridder Info
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(c)format only 1996 Knight-Ridder Info
File 109:Nuclear Sci. Abs. 1948-1976
(c)format only 1995 Knight-Ridder Info
File 108:Aerospace Database 1962-1996/Oct
(c) 1996 AIAA
File 144:Pascal 1973-1996/Sep
(c) 1996 INIST/CNRS
File 94:JICST-EPlus 1985-1996/Sep W5
(c)1996 Japan Science and Tech Corp(JST)
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File 434:Scisearch(R) Cited Ref Sci 1974-1996/Oct W2
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(c) 1996 Inst for Sci Info

Set	Items	Description
S1	15052	(TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-IDEOTELECONFERENC?
S2	10862	S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-25)

S3 10 S2 AND (VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHANG-?)
S4 38 S2 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S5 107 S1 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR CHANNEL?)
S6 69 S2 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR CHANNEL?)
S7 65 S2 AND ((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?)) AND (-NETWORK?(N10)(AUDIO OR VIDEO)))
S8 0 S3 AND S4 AND S6 AND S7
S9 0 S3 AND S4 AND S6
S10 0 S3 AND S6 AND S7
S11 0 S3 AND (S4 OR S6 OR S7)
S12 5 RD S3 (unique items)
S13 0 S4 AND S6 AND S7
S14 2 S4 AND (S6 OR S7)
S15 2 RD S14 (unique items)
S16 36 S4 NOT (S3 OR S14)
S17 27 RD S16 (unique items)
S18 2 (S6 AND S7) NOT (S3 OR S14 OR S16)
S19 2 RD S18 (unique items)

19/5/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

02446126 INSPEC Abstract Number: B85030995
Title: High security television transmission using digital processing
Author(s): Kupnicki, R.; Moote, S.
Conference Title: MILCOM '84. IEEE Military Commuications Conference. Conference Record (Cat. No. 84CH2069-3) p.284-9 vol.2
Publisher: IEEE, New York, NY, USA
Publication Date: 1984 Country of Publication: USA 3 vol. (xvi+564) pp.
U.S. Copyright Clearance Center Code: 84CH2069-3/84/0000-0284$01.00
Conference Sponsor: IEEE; USDOE; Armed Forces Commun. & Electron. Asoc
Conference Date: 21-24 Oct. 1984 Conference Location: Los Angeles, CA, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: The availability of low-cost TC receive only (TVRO) satellite earth stations has made video/audio *****teleconferencing***** affordable. Unfortunately, the same economic considerations have created a security problem due to unauthorized 'eavesdropping'. A need exists to scramble these television signals in order to establish a secure communications *****network*****. Along with hard security for both *****video***** and *****audio***** , the installation of a scrambling system offers additional benefits, including *****multiple***** high-quality audio *****channels*****, an ASCII *****data***** channel, and addressability based on each individual descrambler. Analog and *****digital***** methods of scrambling are compared with respect to encryption technology and signal degradation. An analysis is presented which shows that the hardware and controlling software play a major role in achieving a secure scrambling system. (2 Refs)
Descriptors: cryptography; satellite relay systems; signal processing; television broadcasting; television receivers
Identifiers: video *****teleconferencing*****; audio *****teleconferencing*****; TV broadcasting; TV signals; digital processing ; TC receive only; TVRO; satellite earth stations; security; communications

network; scrambling system; audio channels; ASCII data channel; descrambler ; encryption; signal degradation; software
  Class Codes: B6140 (Signal processing and detection); B6210P (Teleconferencing); B6210 (Telecommunication applications); B6250G (Satellite relay systems); B6420 (Radio and television broadcasting)

19/5/2 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abstracts Online1861-1996/Oct

01372726 ORDER NO: AADMM-86219
DESIGN OF A MULTICAST PACKET SWITCH ARCHITECTURE FOR ATM NETWORKS
  Author: FLIESSER, ROBERT JOHN
  Degree: M.ENG.
  Year: 1993
  Corporate Source/Institution: ROYAL MILITARY COLLEGE OF CANADA (CANADA) (1103)
  Adviser: M. H. RAHMAN
  Source: VOLUME 32/05 of MASTERS ABSTRACTS.
  PAGE 1414. 150 PAGES
  Descriptors: COMPUTER SCIENCE; ENGINEERING, ELECTRONICS AND ELECTRICAL
  Descriptor Codes: 0984; 0544
  ISBN: 0-315-86219-X

Broadband Integrated Services Digital Network (B-ISDN) is conceived as an all-purpose *****digital***** *****network***** that will carry all applications (voice, *****data*****, *****video*****, and images) in an integrated fashion. The primary bottleneck in designing such a network comes from switching. Rapid evolution in the field of telecommunications has led to new switching technologies for integrated networks. Asynchronous Transfer Mode (ATM) has emerged as the most appropriate switching technology. It offers the flexibility to handle the wide diversity of data rate and latency requirements resulting from the integration of different services.

Multicast and broadcast services such as *****teleconferencing*****, entertainment video, and file distribution are highly desirable in a future B-ISDN. The traffic characteristics of these services require ATM switches to handle bursty traffic with multicast connections. In typical multicast packet switch designs, a copy network is used to replicate multicast cells before being forwarded to a point-to-point routing network.

This thesis investigates the design of a nonblocking multicast packet switch utilizing shared-memory buffers. The copy network consists of three nonblocking networks and two shared-memory buffers which preserve cell sequencing. A controller is proposed that controls overflow of cells in the copy network and allows partial cell expansion. The output routing network utilizes a Batcher-banyan network. This switch architecture has parallel operation and fully distributed control, and thereby scales well to large size switches.

An input-input and an input-shared buffered multicast packet switch model are introduced to compare the performance of the shared-memory multicast packet switch. Two methods are proposed to improve the performance of this multicast packet switch. The first method reduces output port contention in the shared-memory multicast buffer by sorting feedback cells. The second method improves the multicast packet switch performance by utilizing *****multiple***** output routing *****networks*****.

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Set	Items	Description
S1	15052	(TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-IDEOTELECONFERENC?
S2	10862	S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-25)

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S3          10   S2 AND (VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHANG-
                 ?)
S4          38   S2 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL
                 OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S5         107   S1 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR
                 CHANNEL?)
S6          69   S2 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR
                 CHANNEL?)
S7          65   S2 AND ((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?)) AND (-
                 NETWORK?(N10)(AUDIO OR VIDEO)))
S8           0   S3 AND S4 AND S6 AND S7
S9           0   S3 AND S4 AND S6
S10          0   S3 AND S6 AND S7
S11          0   S3 AND (S4 OR S6 OR S7)
S12          5   RD S3 (unique items)
S13          0   S4 AND S6 AND S7
S14          2   S4 AND (S6 OR S7)
S15          2   RD S14 (unique items)
S16         36   S4 NOT (S3 OR S14)
S17         27   RD S16 (unique items)
S18          2   (S6 AND S7) NOT (S3 OR S14 OR S16)
S19          2   RD S18 (unique items)
S20         68   S6 NOT (S3 OR S14 OR S16 OR 18)
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S23         46   RD S22 (unique items)

 23/5/1     (Item 1 from file: 2)
DIALOG(R)File   2:INSPEC
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4972526   INSPEC Abstract Number: B9507-6220F-002, C9507-3370-005
 Title: User interfaces for multimedia multiparty communications
  Author(s): Ensor, J.R.; Ahuja, S.R.; Seligmann, D.D.
  Author Affiliation: AT&T Bell Lab., Holmdel, NJ, USA
  p.1165-71 vol.2
  Publisher: IEEE, New York, NY, USA
  Publication Date: 1993    Country of Publication: USA    3 vol. 1974 pp.
  ISBN: 0 7803 0950 2
  U.S. Copyright Clearance Center Code: 0 7803 0950 2/93/$3.00
  Conference  Title: Proceedings of ICC '93 - IEEE International Conference
on Communications
  Conference Sponsor: IEEE Commun. Soc.; IEEE Switzerland Sect
  Conference   Date:   23-26   May   1993    Conference Location:  Geneva,
Switzerland
  Language: English    Document Type: Conference Paper (PA)
  Treatment: Applications (A); Practical (P)
  Abstract: Network control and coordination functions needed to support
multimedia multiparty applications are discussed. Emphasis is placed on
user interfaces for these applications. Whereas conventional, single-medium
devices (such as telephones) present their users with one connection to one
party during a call, these new applications make *****multiple*****
*****network***** resources visible to their users. The authors' experience
suggests that the user interfaces for these applications should not be
built as simple additions to interfaces for conventional devices, but
rather should reflect new communication models with independent controls of
the network resources associated with the application. Important features
of user interfaces are discussed for multimedia conferencing systems,
illustrating how individual controls for network resources can be made
available to the application user during a communication session. The
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benefits of building user interfaces as a collection of modules, in which some modules are responsible for conference conduct and others provide controls for exchange of information in each medium, are explained. (3 Refs)
Descriptors: modules; multimedia communication; telecommunication control ; *****teleconferencing*****; user interfaces
Identifiers: network control; network coordination; multimedia multiparty communications; user interfaces; *****multiple***** *****network***** resources; communication models; network resources; multimedia conferencing systems; modules
Class Codes: B6220F (ISDN and multimedia terminal equipment); B6210R (Multimedia communications); B6210P (Teleconferencing); C3370 (Control applications in telecommunications); C7410F (Communications computing); C6180 (User interfaces); C6130M (Multimedia)

23/5/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

4627088 INSPEC Abstract Number: B9405-6210M-004
Title: The protocol analyzer for primary rate ISDN
Author(s): Sarkin, D.A.
Author Affiliation: Telecommun. Tech. Corp., Germantown, MD, USA
Journal: Evaluation Engineering vol.32, no.9 p.90-2
Publication Date: Sept. 1993 Country of Publication: USA
CODEN: EVENAE ISSN: 0149-0370
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Today, the most popular domestic ISDN service is primary rate ISDN, which features on-demand voice, synchronous data, FAX, *****video***** *****conferencing***** and 800-line services. Because of the unique network characteristics of primary rate ISDN, users have increasingly relied on protocol analyzers to perform compatibility and installation testing over the past two years. These procedures include comprehensive compatibility testing of *****multiple***** D *****channels***** , ISDN circuit installation testing and passive monitoring of the in-service primary rate circuit. (0 Refs)
Descriptors: electronic equipment testing; ISDN; monitoring; network analysers
Identifiers: protocol analyzer; primary rate ISDN; domestic ISDN service; installation testing; compatibility testing; *****multiple***** D *****channels*****; ISDN circuit installation testing; passive monitoring; in-service primary rate circuit
Class Codes: B6210M (ISDN); B6230F (Integrated switching and transmission systems); B7210X (Other instrumentation and measurement systems)

23/5/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

4612906 INSPEC Abstract Number: C9404-6160S-010
Title: Multimedia conferencing as a universal paradigm for collaboration
Author(s): Venkat Rangan, P.; Vin, H.M.
Conference Title: Multimedia. Systems, Interaction and Applications. 1st Eurographics Workshop p.173-85
Editor(s): Kjelldahl, L.
Publisher: Springer Verlag, Berlin, Germany

Publication Date: 1992 Country of Publication: West Germany vi+357 pp.
ISBN: 3 540 55201 4
Conference Date: 18-19 April 1991 Conference Location: Stockholm, Sweden
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: Multimedia interaction between users usually takes the form of conferences. We propose a taxonomy of multimedia conferencing, and develop a model that can support most types of collaborative interactions. The model provides sophisticated features such as access control with respect to different media streams, flexibility to use *****multiple***** media *****channels***** to participate in *****multiple***** conferences simultaneously, and nested conferences. Conferences are treated as first class objects, and we define operations to manipulate such objects. We are carrying out a software implementation of the conferencing paradigm at the Multimedia Laboratory of the University of California, San Diego. (12 Refs)
Descriptors: multimedia systems; *****teleconferencing*****
Identifiers: multimedia conferencing; collaboration; collaborative interactions; access control; *****multiple***** media *****channels*****; multiple conferences; nested conferences; Multimedia Laboratory; University of California
Class Codes: C6160S (Spatial and pictorial databases); C7410F (Communications)

23/5/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

4477574 INSPEC Abstract Number: B9310-6210M-016
Title: Multiple destination routing algorithms
Author(s): Tanaka, Y.; Huang, P.C.
Author Affiliation: Eng. Res. Inst., Tokyo Univ., Japan
Journal: IEICE Transactions on Communications vol.E76-B, no.5 p. 544-52
Publication Date: May 1993 Country of Publication: Japan
CODEN: ITCMEZ ISSN: 0916-8516
Language: English Document Type: Journal Paper (JP)
Treatment: Theoretical (T)
Abstract: With the arrival of B-ISDN, point-to-point routing alone is no longer adequate. A new class of computer and video related services, such as mass mailing, TV broadcasting, *****teleconferencing*****, and video 900 service, requires the *****network***** to handle *****multiple***** destination routing (MDR). Multiple destination routing enables widespread usage of multipoint services at a lower cost than networks using point-to-point routing. With this in mind, network providers are researching more into MDR algorithms. However, the MDR problem itself is very complex. Furthermore, its optimal solution, the Steiner tree problem, is NP-complete and thus not suitable for real-time applications. Recently, various algorithms which approximate the Steiner tree problem have been proposed and, the authors summarize the simulation results of these algorithms. But first, they define the MDR problem, the issues involved, and the benchmark used to compare MDR algorithms. Then, they categorize the existing MDR algorithms into a five-level classification tree. Lastly, they present various published results of static algorithms and simulation results of quasi-static algorithms. (19 Refs)
Descriptors: B-ISDN; telecommunication network routing; trees (mathematics)

Identifiers: quasistatic algorithms; approximation; B-ISDN; point-to-point routing; mass mailing; TV broadcasting; *****teleconferencing*****; video 900 service; multiple destination routing ; multipoint services; network providers; MDR algorithms; Steiner tree problem; NP-complete; simulation results; five-level classification tree; static algorithms
Class Codes: B6210M (ISDN); B6150M (Protocols); B0250 (Combinatorial mathematics)

23/5/5 (Item 5 from file: 2)
DIALOG(R)File 2:INSPEC
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04374661 INSPEC Abstract Number: B9305-6210P-002, C9305-5620-017
Title: *****Video***** *****conferencing***** , file storage, and management in multimedia computer systems
Author(s): Rangan, P.V.
Author Affiliation: Multimedia Lab., California Univ., La Jolla, CA, USA
Journal: Computer Networks and ISDN Systems vol.25, no.8 p.901-9
Publication Date: March 1993 Country of Publication: Netherlands
CODEN: CNISE9 ISSN: 0169-7552
U.S. Copyright Clearance Center Code: 0169-7552/93/$06.00
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: The author presents a *****video***** *****conferencing***** system that can form the basis for supporting most video interactions and services in distributed computing systems. He presents powerful paradigms for collaboration such as conferences using *****multiple***** *****channels***** of video and audio, hierarchically and non-hierarchically related conferences, and develops a model and software architecture for supporting these paradigms in multimedia computer systems. The author describes an implementation of the architecture based on a general event-driven message exchange mechanism, and investigates the resulting issues of control synchronization among agents. A video file server that is integrated with the conferencing architecture to provide storage and retrieval of full-motion video information within conferences has been developed. The conferencing and file systems are integrated at the agent-server level (above the operating systems, but below the user interface). The performance of the system, which has been in operation for several months, is highly satisfactory, showing the feasibility of adding a video dimension to high-performance computing. (15 Refs)
Descriptors: computer networks; file organisation; file servers; multimedia systems; *****teleconferencing*****
Identifiers: video file storage; management; multimedia computer systems; *****video***** *****conferencing***** system; distributed computing systems; model; software architecture; event-driven message exchange mechanism; control synchronization; video file server; full-motion video information; performance
Class Codes: B6210P (Teleconferencing); B6210L (Computer communications); C5620 (Computer networks and techniques); C6150N (Distributed systems); C7410F (Communications); C7104 (Office automation)

23/5/6 (Item 6 from file: 2)
DIALOG(R)File 2:INSPEC
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04345899 INSPEC Abstract Number: B9303-6210-035, C9303-5600-001
Title: Multimedia communications

Author(s): Jae-Yong Lee
Journal: Korea Information Science Society Review vol.10, no.5 p. 67-76
Publication Date: 1992 Country of Publication: South Korea
CODEN: CHKWEN ISSN: 1015-9908
Language: Korean Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: Discusses single user and multi-user systems; packet voice sender and receiver; end-to-end systems; still images and pictures; CAD/CAM; computer graphics; medical imaging; videophones; *****videoconferencing*****; OSI; TCP/IP; lightwave *****networks*****; wave division *****multiple***** access; FDDI; connection management; error control; flow control; acknowledgement management; hypermedia; and abstraction. (58 Refs)
Descriptors: multimedia systems; reviews; telecommunication services
Identifiers: multimedia communications; still images; pictures; CAD/CAM; computer graphics; medical imaging; videophones; *****videoconferencing*****; OSI; TCP/IP; lightwave networks; connection management; error control; flow control; acknowledgement management
Class Codes: B6210 (Telecommunication applications); C5600 (Data communication equipment and techniques); C6160S (Spatial and pictorial databases)

23/5/7 (Item 7 from file: 2)
DIALOG(R)File 2:INSPEC

04264081 INSPEC Abstract Number: B9212-6210P-003
Title: Multi-speaker conferencing over narrowband channels
Author(s): Champion, T.G.
Author Affiliation: COMSEC Eng. Office, Hanscom AFB, MA, USA
Conference Title: Military Communications in a Changing World MILCOM, 91. Conference Record (Cat. No.91CH2981-9) p.1220-3 vol.3
Publisher: IEEE, New York, NY, USA
Publication Date: 1991 Country of Publication: USA 3 vol. xxxvi+1290 pp.
ISBN: 0 87942 691 8
U.S. Copyright Clearance Center Code: CH2981-9/91/0000-1220$01.00
Conference Sponsor: IEEE; Armed Forces Commun. & Electron. Assoc
Conference Date: 4-7 Nov. 1991 Conference Location: McLean, VA, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: A technique for digital conferencing over narrowband channels which allows for the representation of multiple simultaneous speakers is proposed. The technique takes advantage of the properties of multirate parametric vocoders (which includes the sinusoidal transform coder and the multiband excitation vocoder, as well as embedded coders). The technique performs signal summation in a manner similar to analog conferences; however, signal summation is deferred to the terminal. To maintain quality for a single speaker while allowing *****multiple***** speakers, the technique adaptively allocates *****channel***** bandwidth based on the number of speakers to be represented. Development is in progress on a system that allows two simultaneous speakers, although a system for three simultaneous speakers is achievable. (7 Refs)
Descriptors: telecommunication channels; *****teleconferencing*****; vocoders
Identifiers: adaptive bandwidth allocation; digital conferencing; narrowband channels; multiple simultaneous speakers; multirate parametric vocoders; sinusoidal transform coder; multiband excitation vocoder;

embedded coders; signal summation; quality
Class Codes: B6210P (Teleconferencing); B6220 (Stations and subscriber equipment)

23/5/8 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC

04201064 INSPEC Abstract Number: B9209-6250G-004
Title: Trends in private satellite networks
Author(s): Ohtake, Y.
Author Affiliation: NEC Inst. of Manage. Ltd., Tokyo, Japan
Journal: Journal of the Institute of Television Engineers of Japan vol.46, no.1 p.13-22
Publication Date: Jan. 1992 Country of Publication: Japan
CODEN: JITJA7 ISSN: 0386-6831
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Applications (A); Practical (P)
Abstract: Private communication systems using satellites can be applied for interoffice communication, education, training, conferences and data communication. The network configuration involves bilateral/unilateral satellite systems in addition to the ground network systems, digital/analog signal systems, and combination of *****multiple***** communication *****networks***** . The satellite system is characterized by multi-destination delivery (broadcasting) function, broadband transmission function and *****multiple***** connectivity. Many private satellite *****networks***** to use these characteristics effectively have become important as strategic information media for management of companies. (9 Refs)
Descriptors: broadband networks; broadcasting; data communication systems ; education; management information systems; satellite ground stations; satellite relay systems; technological forecasting; *****teleconferencing*****; training
Identifiers: private satellite networks; interoffice communication; education; training; conferences; data communication; network configuration ; ground network systems; *****multiple***** communication *****networks*****; broadcasting; broadband transmission; multiple connectivity; strategic information media; management of companies
Class Codes: B6250G (Satellite relay systems); B0120 (Education and training); B6210P (Teleconferencing)

23/5/9 (Item 9 from file: 2)
DIALOG(R)File 2:INSPEC

04190988 INSPEC Abstract Number: B9208-6210P-010, C9208-7410F-049
Title: Coordination and control of multimedia conferencing
Author(s): Ahuja, S.R.; Ensor, J.R.
Author Affiliation: AT&T Bell Lab., Holmdel, NJ, USA
Journal: IEEE Communications Magazine vol.30, no.5 p.38-43
Publication Date: May 1992 Country of Publication: USA
CODEN: ICOMD9 ISSN: 0163-6804
U.S. Copyright Clearance Center Code: 0163-6804/92/$03.00
Language: English Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: It is shown that multimedia, multipoint conferencing systems create important requirements for the networks they use to transmit information among conference participants. These requirements, which stem

from the need for conferencing systems to emulate the richness of control present in face-to-face conversations, may extend from the user interface to the control and coordination of communication networks. The user interface of a conferencing system should present users with the means to control the conduct of meetings, as well as the exchange and presentation of multimedia information. The virtual meeting room metaphor of Rapport, which provides the foundation for this system's user interface, is described. The creation and communication of multimedia information, conferencing over *****multiple***** and integrated *****networks*****, and requirements for multiport communications are discussed. (7 Refs)

Descriptors: ISDN; local area networks; multimedia systems; telecommunication network management; telecommunications computer control; *****teleconferencing*****; user interfaces

Identifiers: multimedia multipoint conferencing system; *****multiple***** *****networks*****; LAN; control; coordination; user interface; virtual meeting room metaphor; integrated networks

Class Codes: B6210P (Teleconferencing); B6210M (ISDN); B6210L (Computer communications); B6210C (Network management); C7410F (Communications); C3370Z (Other communication techniques); C7420 (Control engineering); C5620L (Local area networks); C6180 (User interfaces)

23/5/10 (Item 10 from file: 2)
DIALOG(R)File 2:INSPEC

04103232 INSPEC Abstract Number: B9204-6210P-020, C9204-7410F-056

Title: Software architecture for integration of video services in the Etherphone system

Author(s): Rangan, P.V.; Swinehart, D.C.

Author Affiliation: Dept. of Comput. Sci. & Eng., California Univ., San Diego, La Jolla, CA, USA

Journal: IEEE Journal on Selected Areas in Communications vol.9, no.9 p.1395-404

Publication Date: Dec. 1991 Country of Publication: USA

CODEN: ISACEM ISSN: 0733-8716

U.S. Copyright Clearance Center Code: 0733-8716/91/1200-1395$01.00

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Software mechanisms that make use of analog transmission and storage of video for computer-controlled video communication and file storage are described. The authors extended the Etherphone voice management system to support *****video***** *****conferencing***** and file storage. The software mechanisms for conference management consist of a central connection manager, and video and user interface agents running on client workstations. A conferencing architecture that supports multiplicity in the number of conferences and media is presented. The video file server stores and retrieves full-motion video information within conferences. It uses optical disks to store video frames and builds a high-level file and directory interface. The user interface to the directory interface is a multimedia document editor that permits video annotations to be freely interspersed with text. The performance of the system, which spans *****multiple***** media *****networks*****, has been highly satisfactory. (20 Refs)

Descriptors: computer communications software; computer networks; multimedia systems; optical disc storage; telecommunications computing; *****teleconferencing*****; visual communication

Identifiers: software architecture; video interface agent; video service integration; analog transmission; computer-controlled video communication; file storage; Etherphone voice management system; *****video*****

*****conferencing*****; central connection manager; user interface agents; client workstations; video file server; full-motion video; optical disks; directory interface; multimedia document editor
Class Codes: B6210P (Teleconferencing); B6210L (Computer communications); C7410F (Communications); C5620 (Computer networks and techniques); C6155 (Computer communications software)

23/5/11 (Item 11 from file: 2)
DIALOG(R)File 2:INSPEC

04087657 INSPEC Abstract Number: B9203-6210L-064, C9203-5620L-035
Title: Multimedia conferencing in the Etherphone environment
Author(s): Vin, H.M.; Zellweger, P.T.; Swinehart, D.C.; Rangan, P.V.
Author Affiliation: Xerox Palo Alto Res. Center, CA, USA
Journal: Computer vol.24, no.10 p.69-79
Publication Date: Oct. 1991 Country of Publication: USA
CODEN: CPTRB4 ISSN: 0018-9162
U.S. Copyright Clearance Center Code: 0018-9162/91/1000-0069$01.00
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: The latest extension of the Etherphone project is described. It creates a powerful conferencing system that lets users control their participation in *****multiple***** conferences across multimedia *****networks*****. The emphasis is on the software mechanisms that support its new features: first, a Sparcstation facility called Phoenix that extends the Etherphone software architecture to permit more flexible conferencing and to control Sparcstation-based Ethernet audio transmission, and, second, the integration of the Phoenix capabilities with Macaw, the earlier video extensions. Also described is a multicast packet protocol for audio transmission, which reimplements and extends the earlier special-purpose protocols, adding per-channel volume control and full support for the extended conferencing modes. (12 Refs)
Descriptors: local area networks; multimedia systems; packet switching; protocols; *****teleconferencing*****
Identifiers: multimedia conferencing; Etherphone environment; multimedia networks; software mechanisms; Sparcstation; Phoenix; Ethernet audio transmission; Macaw; multicast packet protocol
Class Codes: B6210L (Computer communications); B6210P (Teleconferencing); B6150M (Protocols); B6150C (Switching theory); C5620L (Local area networks); C5640 (Protocols)

23/5/12 (Item 12 from file: 2)
DIALOG(R)File 2:INSPEC

04051714 INSPEC Abstract Number: B9202-6210M-084, C9202-5130-057
Title: Basic-rate ISDN ICs
Author(s): Kerridge, B.
Journal: EDN vol.36, no.22 p.112-18, 120, 122, 124
Publication Date: 24 Oct. 1991 Country of Publication: USA
CODEN: EDNSBH ISSN: 0012-7515
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P); Product Review (R); Experimental (X)
Abstract: One objective of the Integrated Service Digital *****Network***** (ISDN) is to bring *****multiple***** *****channels***** of voice and data to small business and domestic users along a single twisted-pair wire. Until recently, this part of the service, known as

'basic-rate ISDN', failed to materialize. Now, a wider range of vendors offers these important ICs. Known as U- and S-interface ICs, some have a performance certified to operate over worst-case, twisted-pair wires. The 160-kbps basic-rate service contains *****separate***** *****channels***** of two 64 kbps and one 16 kbps, called 'bearer' and 'data' channels, respectively (and known as 2B+D). Basic-rate service uses single twisted-pair wiring originally installed for phone communications in a 4-kHz baseband. In January 1991 British Telecom launched basic-rate ISDN and around 700 towns and cities in the UK offer access. At present, equipment approved by the British Approvals Board for Telecommunications is available for fax, *****teleconferencing*****, and PC communications. (3 Refs)
Descriptors: digital signal processing chips; ISDN; telephone lines
Identifiers: U-interface ICs; single twisted-pair wire; basic-rate ISDN; S-interface ICs; 2B+D; single twisted-pair wiring; British Telecom; UK; fax ; *****teleconferencing*****; PC communications; 160 kbit/s
Class Codes: B6210M (ISDN); B1265F (Microprocessors and microcomputers); B6220W (Other stations); C5130 (Microprocessor chips); C5260 (Digital signal processing); C5620 (Computer networks and techniques); C7410F (Communications)
Numerical Indexing: bit rate 1.6E+05 bit/s

23/5/13 (Item 13 from file: 2)
DIALOG(R)File 2:INSPEC

04002951 INSPEC Abstract Number: D91002873
Title: ISDN2 and you (telecommunications)
Author(s): Classe, A.
Journal: Accountancy vol.108, no.1177 p.92-3
Publication Date: Sept. 1991 Country of Publication: UK
CODEN: ACTYAD ISSN: 0001-4664
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: ISDN2, the 'basic rate' service for small or medium businesses, complies with the international CCITT standard. You get a single line carrying two *****separate***** user *****channels*****. This means that you can carry on two phone calls at the same time, as with two ordinary lines. You can connect up to eight terminals to an ISDN2 line, but only two can be active at any one time; some devices, like *****videoconferencing***** equipment, may need a high 'bandwidth' and so demand the use of both channels. A terminal can be virtually any communicating device-phone, fax, videophone or computer, for example. You can assign a single number to the line which callers may use with a suffix to identify the piece of equipment that they want to reach. You can have two *****separate***** numbers for your two *****channels*****. Or you can have eight *****separate***** numbers. (0 Refs)
Descriptors: ISDN; telecommunication services; telephony
Identifiers: ISDN2; telecommunications; businesses
Class Codes: D4000 (Office automation - communications); D4070 (Telephone systems)

23/5/14 (Item 14 from file: 2)
DIALOG(R)File 2:INSPEC

03913186 INSPEC Abstract Number: B91046655
Title: Advanced telecommunication systems based on ISDN

Author(s): Okudono, H.
Journal: Data Communication and Processing vol.22, no.10 p.37-41
Publication Date: 1990 Country of Publication: Japan
CODEN: DTSUDF ISSN: 0285-9394
Language: Japanese Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: ISDN is expected to be the future-generation trunk communications network to realize advanced telecommunication services, because of the following characteristics: (1) digital public networks to provide digital communication services economically for users; (2) high-speed and high-quality communication for superfine facsimile, color video phone, *****video***** *****conferencing***** and high-speed data transmission; (3) *****multiple***** *****channels***** available with a single line (basic interface); (4) integrated services for line switching and packet switching; and (5) a user/network interface based on domestic and international standards. The ISDN services are classified into bearer services (line and packet switching), tele-services (telephone, facsimile and videotex), and other value added services. (0 Refs)
Descriptors: ISDN; telecommunication services
Identifiers: domestic standards; future-generation trunk communications network; advanced telecommunication services; digital public networks; high-speed; high-quality; superfine facsimile; color video phone; *****video***** *****conferencing*****; data transmission; *****multiple***** *****channels*****; single line; basic interface; line switching; packet switching; user/network interface; international standards; bearer services; tele-services; telephone; videotex; value added services
Class Codes: B6210M (ISDN)

23/5/15 (Item 15 from file: 2)
DIALOG(R)File 2:INSPEC

03679954 INSPEC Abstract Number: B90051443, C90053924
Title: A software architecture for workstations supporting multimedia conferencing in packet switching networks
Author(s): Leung, W.-H.F.; Baumgartner, T.J.; Hwang, Y.H.; Morgan, M.J.; Tu, S.-C.
Author Affiliation: AT&T Bell Lab., Naperville, IL, USA
Journal: IEEE Journal on Selected Areas in Communications vol.8, no.3 p.380-90
Publication Date: April 1990 Country of Publication: USA
CODEN: ISACEM ISSN: 0733-8716
U.S. Copyright Clearance Center Code: 0733-8716/90/0400-0380$01.00
Language: English Document Type: Journal Paper (JP)
Treatment: Applications (A); Practical (P)
Abstract: The software architecture of a multimedia workstation connected to an experimental packet switching network which is capable of switching voice, data, and video simultaneously is described. The user of a multimedia workstation may engage in several multimedia calls, each using multiple information streams consisting of voice, data, and images. The network interface software in the workstation maintains the temporal relationship among a given call's information streams. For each call, the *****network***** interface provides a *****multiple***** information *****channel***** interface to upper layer software supporting the notion of a multimedia virtual circuit. A connector mechanism is provided to control the information exchange among the network interface, the various voice, data, and image peripherals, and the computer programs used in a multimedia application. These information sources and sinks share a common

abstraction called active devices. (23 Refs)
Descriptors: packet switching; *****teleconferencing*****; workstations
Identifiers: UNIX programs; software architecture; multimedia conferencing; packet switching networks; multimedia workstation; voice; data; video; images; network interface software; multimedia virtual circuit ; computer programs; active devices
Class Codes: B6210L (Computer communications); B6210P (Teleconferencing); C7410F (Communications); C5540 (Terminals and graphic displays); C5620 (Computer networks and techniques)

23/5/16 (Item 16 from file: 2)
DIALOG(R)File 2:INSPEC

03582718 INSPEC Abstract Number: B90023920, C90022826
Title: Co-operative computing and control
Author(s): Taylor, J.M.
Author Affiliation: Hewlett-Packard Labs., Bristol, UK
Journal: IEE Proceedings E (Computers and Digital Techniques) vol.137, no.1 p.1-16
Publication Date: Jan. 1990 Country of Publication: UK
CODEN: IPETD3 ISSN: 0143-7062
U.S. Copyright Clearance Center Code: 0143-7062/90/$3.00+0.00
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: The pace of innovation in the information technologies continues unabated, and massive investment in the digital infrastructure required for distributed information systems is proceeding steadily. The paper summarises some of the basic technology trends of the past five years and describes some of the consequent systems trends, including workstation networks, open system standards, digital communications and computer supported co-operative work. A key characteristic of most of these developments is the need for systems that support co-operation between people, between people and machines, between machines, and between organisations. Some examples of these are discussed including X400 electronic mail, CCITT SS7 *****separate***** *****channel***** signalling and electronic conferencing. Some of the newer disciplines required to support an engineering approach to building very large distributed information systems are then described, including protocol engineering, distributed systems architecture, object-oriented design and system control and management. The paper concludes by reviewing some of the issues these technologies raise for the engineering professional and the role of the IEE in the 1990s. (12 Refs)
Descriptors: computer networks; data communication systems; electronic mail; man-machine systems; standards; *****teleconferencing*****
Identifiers: cooperative computing; cooperative control; information technologies; digital infrastructure; distributed information systems; workstation networks; open system standards; digital communications; computer supported co-operative work; X400 electronic mail; CCITT SS7 *****separate***** *****channel***** signalling; electronic conferencing; protocol engineering; distributed systems architecture; object-oriented design
Class Codes: B6210 (Telecommunication applications); C7410F (Communications); C5620 (Computer networks and techniques)

23/5/17 (Item 17 from file: 2)
DIALOG(R)File 2:INSPEC

03436493 INSPEC Abstract Number: B89057295
Title: Routing algorithms of multiple destination telecommunication services
Author(s): Tanaka, A.; Mizusawa, J.
Author Affiliation: NTT Commun. Switching Labs., Musashino, Japan
Journal: Transactions of the Institute of Electronics, Information and Communication Engineers B-I vol.J72B-I, no.4 p.293-304
Publication Date: April 1989 Country of Publication: Japan
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Theoretical (T)
Abstract: The 'Audio-Graphic Multipoint *****Teleconferencing***** Service', with which a subscriber can simultaneously communicate two-way with up to 30 subscribers, is now implemented in Tokyo 03-MA. This service is realized with voice distributing 'bridges'. More than one 'bridge' should be arranged in a network with appropriate routing, in order to implement this kind of *****multiple***** destination system in telecommunication *****networks***** more widely and economically. Since the 'bridge' cost is much less than the cost of circuit-utilization, routing algorithms which desirably minimize the cost of circuit-utilization are proposed. (18 Refs)
Descriptors: network topology; telecommunication networks; telecommunication services; *****teleconferencing*****
Identifiers: voice distributing bridges; routeing algorithms; multiple destination telecommunication services; Audio-Graphic Multipoint *****Teleconferencing***** Service; Tokyo 03-MA; telecommunication networks ; routing algorithms
Class Codes: B6210P (Teleconferencing); B6150 (Communication switching theory)

23/5/18 (Item 18 from file: 2)
DIALOG(R)File 2:INSPEC

03339434 INSPEC Abstract Number: B89025723, C89022770
Title: Packet switched voice conferencing across interconnected networks
Author(s): Weiss, G.; Ziegler, C.
Author Affiliation: Dept. of Comput. & Inf. Sci., Brooklyn Coll., NY, USA
Conference Title: Proceedings of the 13th Conference on Local Computer Networks (IEEE Cat. No.88CH2613-8) p.114-24
Publisher: IEEE Comput. Soc. Press, Washington, DC, USA
Publication Date: 1988 Country of Publication: USA x+480 pp.
ISBN: 0 8186 0891 9
U.S. Copyright Clearance Center Code: CH2613-9/88/0000-0114$01.00
Conference Sponsor: IEEE
Conference Date: 10-12 Oct. 1988 Conference Location: Minneapolis, MN, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: The authors extend the logical ring control mechanism of C. Zielger et al. to the case of a multiparty conference across interconnected networks. In addition, the alternate implementation is expanded to allow for *****multiple*****-*****network***** connectivity. A comparative *****network***** between the alternate implementation methods with respect to station workload, gateway workload, network workload, and maximum number of conference participants is presented and discussed. (21 Refs)
Descriptors: packet switching; *****teleconferencing*****
Identifiers: packet switched voice conferencing; interconnected networks; ring control mechanism; *****multiple*****-*****network***** connectivity;

station workload; gateway workload; network workload
Class Codes: B6210P (Teleconferencing); B6150 (Communication switching theory); C7410F (Communications)

23/5/19 (Item 19 from file: 2)
DIALOG(R)File 2:INSPEC

03296319 INSPEC Abstract Number: B89011127
Title: Experimental ISDN system with multimedia storage and intelligent service control capabilities
Author(s): Yamaguchi, K.; Kamata, H.; Aritaka, N.; Morita, S.
Author Affiliation: Fujitsu Lab. Ltd., Kawasaki, Japan
Conference Title: ISSLS 88: The International Symposium on Subscriber Loops and Services. Proceedings (Cat. No.88CH2536-1) p.123-7
Publisher: IEEE, New York, NY, USA
Publication Date: 1988 Country of Publication: USA vii+296 pp.
U.S. Copyright Clearance Center Code: CH2536-1/88/0000-0123$01.00
Conference Sponsor: IEEE; NTG, Germany; SEE, France; SER, Sweden; Klvi/NERG, Netherlands; AEI, Italy; IEICE, Japan
Conference Date: 11-16 Sept. 1988 Conference Location: Boston, MA, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: ISDN involves three integrations: media, functional, and user-interface integration. With this understanding, the authors have developed *****teleconferencing***** , multimedia mail, and electronic secretary services which make use of two strong points of ISDN: a clean B channel and advanced D *****channel***** signalling. Multimedia communication using *****multiple***** digitized B *****channels***** can be applied in both real-time communication service (*****teleconferencing*****) and store/forward service (multimedia mail service). The D channel allows user network control and provides users with customized services such as the electronic secretary service. The basic concept of these services and the experimental ISDN system for evaluating them are described. (4 Refs)
Descriptors: electronic mail; ISDN; *****teleconferencing*****
Identifiers: experimental ISDN; multimedia storage; intelligent service control capabilities; media; functional; user-interface integration; *****teleconferencing*****; multimedia mail; electronic secretary services; clean B channel; advanced D channel signalling; *****multiple***** digitized B *****channels*****; real-time communication service; store/forward service; customized services
Class Codes: B6210M (ISDN); B6210P (Teleconferencing); B6210G (Electronic mail)

23/5/20 (Item 20 from file: 2)
DIALOG(R)File 2:INSPEC

02886033 INSPEC Abstract Number: B87031133
Title: GLOBECOM '86: IEEE Global Telecommunications Conference. Communications Broadening Technology Horizons. Conference Record (Cat. No.86CH2298-9)
Publisher: IEEE, New York, NY, USA
Publication Date: 1986 Country of Publication: USA 3 vol. xxii+1878 pp.
Conference Sponsor: IEEE
Conference Date: 1-4 Dec. 1986 Conference Location: Houston, TX, USA

Language: English Document Type: Conference Proceedings (CP)
Abstract: The following topics are dealt with: local area networks; signal processing for ISDN; communication protocols; computer simulation of communication systems; spread-spectrum and coded communications; tropical radio propagation; quality assurance management; video coding for *****teleconferencing*****; VLSI for communications; switching for ISDN; *****multiple***** access; intelligent *****networks***** ; tracking systems; video on optical fibers; network performance and management; space optical systems; interfacing wideband networks; software quality management; digital radio links; computer network protocols; database control; adaptive-filtering blind equalization; signal processing for satellite communication spread-spectrum packet networks; fiber-optic network design and analysis; common-channel signaling; and digital microwave systems. Abstracts of individual papers can be found under the relevant classification codes in this or other issues.
Descriptors: optical communication; radiocommunication; switching systems ; telecommunication networks; video signals
Identifiers: local area networks; signal processing; ISDN; communication protocols; computer simulation; spread-spectrum; coded communications; tropical radio propagation; quality assurance management; video coding; *****teleconferencing*****; VLSI; switching; multiple access; intelligent networks; tracking systems; optical fibers; network performance; management ; space optical systems; interfacing; wideband networks; software quality management; digital radio links; computer network protocols; database control; adaptive-filtering blind equalization; satellite communication; packet networks; fiber-optic network design; common-channel signaling; digital microwave systems
Class Codes: B0100 (General electrical engineering topics); B6210M (ISDN); B6210P (Teleconferencing); B6230 (Switching centres and equipment); B6250 (Radio links and equipment); B6260 (Optical links and equipment); B6430 (Television equipment, systems and applications)

23/5/21 (Item 21 from file: 2)
DIALOG(R)File 2:INSPEC

02512580 INSPEC Abstract Number: B85052555, C85042806
Title: Audio-graphic multipoint *****teleconferencing***** service
Author(s): Ishikawa, H.; Nakajima, A.; Izumi, N.; Naruse, H.
Author Affiliation: NTT, Tokyo, Japan
Journal: Electrical Communication Laboratories Technical Journal vol.34, no.4 p.655-72
Publication Date: 1985 Country of Publication: Japan
CODEN: TJECAS ISSN: 0415-3200
Language: Japanese Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: An audio-graphic multipoint *****teleconferencing***** system has been developed for the public switched telephone *****network***** (PSTN). This system provides two *****separate***** advanced telephone *****network***** services. The Telecom Plaza service, which is an open type meet-me service where up to ten people can call the plaza, and the *****teleconferencing***** service, which is a closed type multipoint dialing service where a host can simultaneously call up to 30 participants. To realize this system, a voice bridge and a data bridge, developed using a digital signal processing technique, were incorporated into an electronic switching system at higher PSTN hierarchy levels. The thinking behind these services, the voice and data bridges structure, and the hardware and software structure required to realize this system are described. (13 Refs)

Descriptors: audio systems; electronic switching systems; telecommunications computing; *****teleconferencing*****
Identifiers: audio-graphic *****teleconferencing*****; multipoint *****teleconferencing***** service; public switched telephone network; PSTN ; telephone network services; multipoint dialing service; voice bridge; data bridge; digital signal processing; electronic switching system; software
Class Codes: B6210D (Telephony); B6210P (Teleconferencing); B6230B (Electronic telephone exchanges); B6430J (Applications of television systems); B6450 (Audio equipment and systems); C7410F (Communications)

23/5/22 (Item 22 from file: 2)
DIALOG(R)File 2:INSPEC

02480873 INSPEC Abstract Number: B85042526
Title: Configuration of a network
Journal: Telephone Engineer and Management vol.89, no.1 p.62-5
Publication Date: 1 Jan. 1985 Country of Publication: USA
CODEN: TPEMAW ISSN: 0040-263X
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: The Argo network was designed to provide business users with high-quality, cost-effective long distance service through a digital network that offers switched voice communications and enhanced services, including data transmission, *****videoconferencing***** , and facsimile transmission. The common transit point for all signals transmitted through the system is the satellite. At present, the network consists of 15 essentially identical nodes, each node consisting of a stored-program controlled digital switch and the local distribution network that interfaces with customers. The switch interfaces with the transmission system using the standard T-1 signal format; other interfaces may be digital or analog, depending on the nature of the local network. Calls are routed through the *****network***** by a Time Division *****Multiple***** Access (TDMA) system that enables each node to utilize the satellite's available capacity. The configuration of the system is shown. (0 Refs)
Descriptors: digital communication systems; multi-access systems; satellite relay systems; telecommunication networks; time division multiplexing
Identifiers: satellite system; telecommunications network; Argo network; digital network; switched voice communications; data transmission; *****videoconferencing*****; facsimile transmission; stored-program controlled digital switch; local distribution network; T-1 signal format; interfaces; Time Division Multiple Access; TDMA
Class Codes: B6210 (Telecommunication applications); B6230B (Electronic telephone exchanges); B6250G (Satellite relay systems)

23/5/23 (Item 23 from file: 2)
DIALOG(R)File 2:INSPEC

02427622 INSPEC Abstract Number: B85025282
Title: Examination of the concept of introducing new telecommunications and telematics facilities into the Yugoslav PTT
Author(s): Viliman, G.
Journal: Telekomunikacije vol.33, no.3 p.40-50
Publication Date: Sept. 1984 Country of Publication: Yugoslavia
CODEN: TLKMAY ISSN: 0040-2605

Language: Croatian Document Type: Journal Paper (JP)
Treatment: Applications (A)
Abstract: The concept is introduced both on the basis of the state of the facilities available at present to users, and by comparing the range of facilities in the country and in other postal administrations with the trends in the development of facilities, emphasizing the integration of services in the digital network. It is on the basis of such considerations, taking into account the technical potential of the present network, the investment program of the PTT, the facilities which exist, the interests of the users etc., that the concept of introducing new telecommunications and telematics facilities into the Yugoslav PTT has been formulated. In view of this the introduction of new facilities could take place in three stages; the first up to 1990, the second up to the year 2000 and the third after 2000. In the first stage it would be necessary to introduce on a *****separate***** *****network***** the transmission of data for facsimile, teletext, videotext and *****teleconferencing*****. At the same time it would be necessary to give priority to the further development of the network and to the conditions for introducing the new services. (22 Refs)
Descriptors: digital communication systems; telecommunication networks
Identifiers: services integration; telecommunications; telematics; Yugoslav PTT; digital network; facsimile; teletext; videotext; *****teleconferencing*****
Class Codes: B6210 (Telecommunication applications)

23/5/24 (Item 24 from file: 2)
DIALOG(R)File 2:INSPEC

01880676 INSPEC Abstract Number: B82037220, C82027711
Title: Local network design for office automation
Author(s): Mercier-Laurent, C.
Author Affiliation: Projet Kayak, Inria, Le Chesnay, France
Conference Title: Networks from the User's Point of View. Proceedings of the IFIP TC-6 Working Conference COMNET '81 p.49-55
Editor(s): Csaba, L.; Szentivanyi, T.; Tarnay, K.
Publisher: North-Holland, Amsterdam, Netherlands
Publication Date: 1981 Country of Publication: Netherlands xvi+664 pp.
ISBN: 0 444 86291 9
Conference Date: 11-15 May 1981 Conference Location: Budapest, Hungary
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: In the Kayak project, a local network has been built, called DANUBE, for an experimental distributed office system. The characteristics are: bus *****network***** based on the carrier sense *****multiple***** access with collision detection (CSMA/CD) principle; 1 Km. of distance coverage; 255 station ports; 1 M bits/sec of data rate. This network permits the interconnection of office workstations and the access to major applications (e.g. messaging, *****teleconferencing*****, archival...). The author describes the design concepts and the configuration which presently exists. (4 Refs)
Descriptors: administrative data processing; computer networks; data communication systems; systems analysis
Identifiers: network design; office automation; Kayak project; local network; DANUBE; distributed office system; multiple access; messaging; *****teleconferencing*****; design concepts
Class Codes: B6210L (Computer communications); B6210P (Teleconferencing); C5620 (Computer networks and techniques); C6110 (Systems analysis and

programming); C7100 (Business and administration)

23/5/25 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03860728 E.I. No: EIP94051290043
Title: Proceedings of the IEEE Global Telecommunications Conference. Part 1 (of 4)
Author: Anon (Ed.)
Conference Title: Proceedings of the IEEE Global Telecommunications Conference. Part 1 (of 4)
Conference Location: Houston, TX, USA Conference Date: 19931129-19931202
Sponsor: IEEE
E.I. Conference No.: 20155
Source: IEEE Global Telecommunications Conference v 1 1993. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA,93CH3250-8. 670p
Publication Year: 1993
CODEN: CRIEET ISBN: 0-7803-0917-0
Language: English
Document Type: CP; (Conference Proceedings) Treatment: T; (Theoretical); G; (General Review); A; (Applications)
Journal Announcement: 9406W4
Abstract: This conference proceedings contain 122 papers. Topics covered include: Broadband Integrated Service Digital *****Network***** (BISDN) architectures and services; *****multiple***** access techniques for wireless *****networks*****; mobile data communications; high-speed optical networks; security and authentication; network management techniques and tools; network restoration techniques and tools; optical and cables system access; radio resource assignment in personal communications; RACE (Research in Advanced Communications in Europe) status 93; distributed software architecturees for network and management systems; intuitive interfaces for telecommunication applications and services; bandwidth management in ATM networks; multiwavelength networks; total quality management; wireless network architecture, control and protocols; universal personal satellite communications; microelectronics and communications; and, management and interooperability modeling.
Descriptors: Telecommunication networks; Telecommunication systems; Radio communication; Optical communication; Optical communication equipment; Digital signal processing; Frequency division multiplexing; Mobile telecommunication systems; Cellular radio systems; *****Teleconferencing*****
Identifiers: Computer simulation; Mathematical models; Asynchronous Transfer Mode (ATM); *****Network***** architecture; *****Multiple***** access systems; Standards; *****Network***** protocols; Management; Quality assurance; Crytography
Classification Codes:
716.3 (Radio Systems & Equipment); 716.1 (Information & Communication Theory); 716.4 (Television Systems & Equipment); 723.5 (Computer Applications); 718.1 (Telephone Systems & Equipment)
716 (Radar, Radio & TV Electronic Equipment); 921 (Applied Mathematics); 723 (Computer Software); 718 (Telephone & Line Communications)
71 (ELECTRONICS & COMMUNICATIONS); 92 (ENGINEERING MATHEMATICS); 72 (COMPUTERS & DATA PROCESSING)

23/5/26 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02599075 E.I. Monthly No: EI8807068885
Title: AUDIO CONFERENCE SYSTEM WITH DIVIDED SPEECH-BAND VOICE-SWITCHING CIRCUIT.
Author: Oikawa, Hiroshi; Nishino, Masakazu; Tobita, Mizuhiro
Corporate Source: NTT, Jpn
Source: Denki Tsushin Kenkyusho Kenkyu Jitsuyoka Hokoku/Electrical Communications Laboratories Review v 37 n 2 1988 p 183-190
Publication Year: 1988
CODEN: DTKKAA ISSN: 0415-3200
Language: Japanese
Document Type: JA; (Journal Article) Treatment: G; (General Review)
Journal Announcement: 8807
Abstract: This paper describes the design of an audio *****teleconference***** system with divided speech-band voice-switching circuit and a microphone selective control circuit. This audio *****teleconference***** system offers good speech quality without chopping voices. It also allows conference participants to be able to use a facsimile machine through an analog telephone network during their conference. (Author abstract) In Japanese. 8 refs.
Descriptors: *****TELECONFERENCING*****; FACSIMILE; TELEPHONE SYSTEMS; MICROPHONES
Identifiers: AUDIO *****TELECONFERENCE***** SYSTEM; DIVIDED SPEECH-BAND VOICE-SWITCHING CIRCUIT; ANALOG TELEPHONE *****NETWORK*****; MICROPHONE SELECTIVE CONTROL CIRCUIT; *****MULTIPLE***** MICROPHONE SYSTEM
Classification Codes:
718 (Telephone & Line Communications); 752 (Sound Equipment & Systems)
71 (ELECTRONICS & COMMUNICATIONS); 75 (ACOUSTICAL TECHNOLOGY)

23/5/27 (Item 3 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02116285 E.I. Monthly No: EIM8609-059028
Title: SERVICES IN THE INS MODEL SYSTEM AND THEIR EVALUATION.
Author: Arimura, Takayuki; Tokikuni, Kentaro
Corporate Source: NTT, Musashino, Jpn
Conference Title: GLOBECOM '85: IEEE Global Telecommunications Conference - Conference Record.
Conference Location: New Orleans, LA, USA Conference Date: 19851202
Sponsor: IEEE Communications Soc, New York, NY, USA; IEEE, New Orleans Section, New Orleans, LA, USA
E.I. Conference No.: 08283
Source: Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 85CH2190-7), Piscataway, NJ, USA p 773-777
Publication Year: 1985
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8609
Abstract: The Information Network System (INS) is expected to play a key role as the infrastructure for a sophisticated information-intensive society. NTT is now conducting a large-scale trials on a pilot plant for the INS, called the INS Model System. This model system, which began overall operation in September 1984, is composed of two *****separate***** *****networks*****, a 64-kb/s digital network and a broadband network, offering a variety of new telecommunications services. The services offered in the INS Model System are outlined and evaluated on the basis of questionnaires which were supplied to service monitors. 4 refs.

Descriptors: DIGITAL COMMUNICATION SYSTEMS--*Voice/Data Integrated Services; OPTICAL COMMUNICATION; FIBER OPTICS; *****TELECONFERENCING*****; FACSIMILE
Identifiers: INFORMATION NETWORK SYSTEM (INS); BROADBAND NETWORK; VIDEO TRANSMISSION SERVICE
Classification Codes:
718 (Telephone & Line Communications); 717 (Electro-Optical Communications); 741 (Optics & Optical Devices)
71 (ELECTRONICS & COMMUNICATIONS); 74 (OPTICAL TECHNOLOGY)

23/5/28 (Item 4 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02095178 E.I. Monthly No: EIM8606-035108
Title: CHARACTERISTICS, FLEXIBILITY AND INTERLINKING POSSIBILITIES OF THE EUTELSAT-SMS BUSINESS NETWORKS.
Author: Amadesi, P.; Nelson, A.; Crespo, E.
Corporate Source: EUTELSAT, Paris, Fr
Conference Title: Conference Record - IEEE International Conference on Communications, 1985.
Conference Location: Chicago, IL, USA Conference Date: 19850623
Sponsor: IEEE Communications Soc, New York, NY, USA; IEEE, Chicago Section, Chicago, IL, USA
E.I. Conference No.: 07862
Source: Conference Record - International Conference on Communications 1985. Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 85CH2175-8), Piscataway, NJ, USA p 1284-1288
Publication Year: 1985
CODEN: CICCDV ISSN: 0536-1486
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8606
Abstract: The EUTELSAT Satellite Multiservice System (SMS) was conceived to accommodate the emerging demand for business traffic in Europe. The system is at present comprised of two *****distinct***** satellite *****networks*****, one using a transponder of a EUTELSAT I satellite, the other using part of the capacity of the French domestic satellite TELECOM I under a contract between EUTELSAT and the French P. T. T. Administration. The authors summarize the fundamental technical features of these two networks and indicates the types of service available to the business world in Europe with those networks. 6 refs.
Descriptors: TELECOMMUNICATION LINKS, SATELLITE; *****TELECONFERENCING*****; ELECTRONIC MAIL; DIGITAL COMMUNICATION SYSTEMS; DATA PROCESSING, BUSINESS
Identifiers: SATELLITE MULTISERVICE SYSTEM (SMS); EUTELSAT-SMS BUSINESS NETWORKS; BUSINESS COMMUNICATION; INTERLINKING; USER BIT GRADE
Classification Codes:
716 (Radar, Radio & TV Electronic Equipment); 723 (Computer Software)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

23/5/29 (Item 5 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01851743 E.I. Monthly No: EIM8502-006253
Title: HIGH SECURITY TELEVISION TRANSMISSION USING DIGITAL PROCESSING.
Author: Kupnicki, R. P.; Moote, S. P.

Corporate Source: Digi-Tel Inc, USA
Conference Title: IEEE Military Communications Conference, MILCOM '84: Progress in Satellite Communications.
Conference Location: Los Angeles, CA, USA Conference Date: 19841021
Sponsor: IEEE Communications Soc, New York, NY, USA; US Dep of Defense, Washington, DC, USA; Armed Forces Communications & Electronics Assoc, Falls Church, VA, USA
E.I. Conference No.: 05837
Source: Proceedings - IEEE Military Communications Conference 1984 v 2. Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 84CH2069-3), Piscataway, NJ, USA p 284-289
Publication Year: 1984
CODEN: PMICET
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8502
Abstract: The availability of low-cost TV Receive Only (TVRO) satellite earth stations has made video/audio *****teleconferencing***** an affordable alternative. Unfortunately, the same economic considerations have created a security problem due to unauthorized 'eavesdropping'. A need exists to scramble these television signals in order to establish a secure communications network. The installation of a scrambling system offers additional benefits, including *****multiple***** high quality audio *****channels*****, ASCII data channel, and addressability based on each individual descrambler. The paper compares analog and digital methods of scrambling with respect to encryption technology and signal degradation.
Descriptors: *TELEVISION TRANSMISSION; CRYPTOGRAPHY
Identifiers: VIDEO/AUDIO *****TELECONFERENCING*****; COMMUNICATION SECURITY; SIGNAL SCRAMBLING
Classification Codes:
716 (Radar, Radio & TV Electronic Equipment); 723 (Computer Software)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

23/5/30 (Item 6 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

01219169 E.I. Monthly No: EIM8207-002295
Title: SBS - ENABLING TECHNOLOGY
Author: Hall, Robert C.
Corporate Source: Satell Bus Syst, USA
Conference Title: Proceedings of the 5th International Conference on Computer Communication, Computer Communications: Increasing Benefits for Society.
Conference Location: Atlanta, Ga, USA Conference Date: 19801027
Sponsor: Int Counc for Comput Commun
E.I. Conference No.: 00070
Source: Publ by Int Counc for Comput Commun, distrib by North-Holland Publ Co, New York, NY, USA p 176-181
Publication Year: 1980
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8207
Descriptors: *TELECOMMUNICATION LINKS, SATELLITE--*Design
Identifiers: COMMUNICATION SATELLITES; INTEGRATED VOICE, DATA AND IMAGE COMMUNICATIONS; DIGITAL COMMUNICATION SYSTEMS; VIDEO *****TELECONFERENCING*****; TIME-DIVISION *****MULTIPLE***** ACCESS; DATA *****CHANNELS*****
Classification Codes:

716 (Radar, Radio & TV Electronic Equipment); 655 (Spacecraft)
71 (ELECTRONICS & COMMUNICATIONS); 65 (AEROSPACE ENGINEERING)

23/5/31 (Item 1 from file: 99)
DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs

1116336 H.W. WILSON RECORD NUMBER: BAST93048473
Throwing, pitching and catching sound: audio windowing models and modes
Cohen, Michael;
International Journal of Man-Machine Studies v. 39 (Aug. '93) p. 269-304
DOCUMENT TYPE: Feature Article ISSN: 0020-7373 LANGUAGE: English
RECORD STATUS: New record

ABSTRACT: The construction of 2 audio windowing systems is presented. Audio windowing systems are designed to declutter the cacophony of, for example, a *****teleconference*****. They represent user interfaces that perceptually *****separate***** the input *****channels*****. "Handy Sound" is an egocentric audio windowing system combining a hand-posture interpretation frontend with an enhanced spatial sound system. Multidimensional Audio Windows is an exocentric graphical user interface incorporating visual representations of the entities in a mouse-driven interface. It extends standard idioms for window, icon, menu, and pointing device systems to audio window applications. After reviewing the evolution of input/output dimensionality and motivating the use of audio interfaces, including audio imaging by spatial sound and filters, these 2 audio windowing systems are analyzed in terms of the attributes of virtual position, sound quality, and gain.
DESCRIPTORS: User interfaces (Computers)--Design; Gesture; Multimedia devices;

23/5/32 (Item 1 from file: 1)
DIALOG(R)File 1:Eric

ED348967 IR015644
Innovation and the Process of Change: A Case Study in Distance Education.
Schrum, Lynne
Apr 1992
14p.; Paper presented at the Annual Conference of the American Educational Research Association (San Francisco, CA, April 20-24, 1992).
EDRS Price - MF01/PC01 Plus Postage.
Language: English
Document Type: PROJECT DESCRIPTION (141); CONFERENCE PAPER (150)
Geographic Source: U.S.; Oregon
Journal Announcement: RIEJAN93

The purpose of this study is to describe and analyze Oregon's efforts to provide equal access to education, training, and information services to its citizens using advanced communication technologies through ED-NET, an innovative state agency for distance learning. It is noted that creation of ED-NET in 1989 required the coordination of multiple educational institutions, governmental agencies, private businesses, and legislative processes, as well as the development of three separate electronic networks, each with hardware and programming requirements. Discussion of the theoretical framework for the study reviews the forces influencing the development of ED-NET, including the political climate and culture as well as distance learning and information technologies. Methods and data sources for the study are then briefly described. The four significant themes

considered to be critical to the successful implementation of ED-NET are discussed in some detail, including major problems they have created: (1) intra- and inter-agency cooperation; (2) economic self-sufficiency; (3) hardware issues; and (4) programming. It is noted that, despite initial setbacks, the ED-NET system has gradually begun to function and to demonstrate potential for the future. Four recommendations conclude the report. (ALF)

Descriptors: Access to Education; *Change Strategies; *Cooperative Programs; Costs; *Distance Education; Educational Change; Elementary Secondary Education; Higher Education; Information Services; Innovation; Problems; *Program Implementation; Programing; *State Programs; *Telecommunications; Teleconferencing

Identifiers: *Oregon

23/5/33 (Item 2 from file: 1)
DIALOG(R)File 1:Eric

ED348945 IR015601

North Dakota Interactive Video Network: A Practical Guide to Teleconferencing and Distance Education.

Tykwinski, Joseph R.; Poulin, Russell C.

North Dakota Univ. System, Bismarck.

1991

68p.; Adapted from the Oregon Ed-Net Faculty Handbook, "Teaching from a Distance" (Jon Root et al.). Photographs will copy poorly.

EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.

Language: English

Document Type: TEACHING GUIDE (052); NON-CLASSROOM MATERIAL (055)

Geographic Source: U.S.; North Dakota

Journal Announcement: RIEJAN93

Target Audience: Teachers; Practitioners

North Dakota is one of the first states to create a statewide system--the Interactive Video Network (IVN)--that allows multiple video conferencing between two or more sites. In 1990-91, IVN connected 10 campuses and the State Capitol. IVN's purpose is to deliver quality postsecondary programs to students who would not otherwise have access to these services; improve the quality of offerings on each campus; and expand services with elementary, secondary and vocational education, state agencies, the private sector, and other states. This faculty handbook for using IVN is divided into six chapters: (1) Introduction to the North Dakota Interactive Video Network; (2) Classroom Layout and Equipment; (3) Personnel, Management, and Scheduling for IVN; (4) Adapting a Classroom Presentation Style to Interactive Video; (5) Overcoming the "Distance" in Distance Education and Maintaining an Appropriate Level of Interaction; and (6) Preparing and Presenting Visual Aids. It is noted that expansion of the system to serve state agencies, the public, and elementary and secondary schools is planned. A five-item bibliography and a glossary of terms are included. (ALF)

Descriptors: *Distance Education; Faculty Handbooks; Higher Education; *Interactive Video; *Multimedia Instruction; Production Techniques; Teaching Methods; *Telecommunications; *Teleconferencing

Identifiers: *Interactive Video Network ND; *North Dakota University System

23/5/34 (Item 3 from file: 1)
DIALOG(R)File 1:Eric

ED261704 IR051280
Information Identification and Organization. Student Study Guide. Module II: Organization and Acquisition of Information and Materials.
Bolvin, Boyd M.; West, Sharon
Alaska Univ., Fairbanks. Elmer E. Rasmuson Library.
[1984
72p.; For related documents, see IR 051 279-281.
Sponsoring Agency: Alaska State Library, Juneau.
Available from: Media Production Associates, 10506 Wauna Street, S.W., Tacoma, WA 98498.
EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.
Language: English
Document Type: INSTRUCTIONAL MATERIAL (051)
Geographic Source: U.S.; Alaska
Journal Announcement: RIEFEB86
Target Audience: Students
This second module in a three module program examines the types of materials and services that are available in a community information center or library and the tools or sources for obtaining them. The module covers: ways in which books and other materials are arranged and organized; descriptions of library catalogs and the basic information found on catalog cards or bibliographic records, regardless of format (card, microfilm roll, or microfiche sheet); and the meaning of bibliographic records, and how to recognize author, title, and subject cards. The module also teaches the student how to: develop a book purchase plan based upon the needs of a particular community; use journals and established lists to acquire, identify, and organize library materials; select periodicals; establish and become familiar with the uses of a periodical record file; and set up and use a library shelf list or inventory file. Students also gain a working knowledge of the Alaska Library Network (ALN) and its multiple uses for interlibrary loan (ILL), reference, cataloging, and selecting library materials. Each unit has learning activities, self-tests, tests, and assignments. Answers to the self-tests are provided in the document. (THC)
Descriptors: Audiotape Recordings; *Cataloging; Community Information Services; Distance Education; Higher Education; *Information Sources; Interlibrary Loans; Learning Modules; Library Catalogs; Library Collection Development; *Library Education; *Library Materials; Library Networks; *Library Services; *Library Technical Processes; Periodicals; Slides; Teleconferencing
Identifiers: *University of Alaska

23/5/35 (Item 1 from file: 202)
DIALOG(R)File 202:Information Science Abs.

00120827 8800827
ISA Document Number in Printed Publication: 8801481
Proceedings, GLOBECOM '82: IEEE Global Telecommunications Conference. Miami, FL, Nov 29-Dec 2, 1982.
Document Type: Monographic
Publication Language(s): English
Publication Country: United States
Source: 1383 pp. 1982 IEEE New York, NY
The third volume of these conference proceedings is comprised of 94 papers presented at the conference on Global Telecommunications sponsored by the IEEE Society in 1982. Sessions within which these papers are presented are as follows: 1) local area networks using fiber optics: 2) visually augmented *****teleconferencing*****; 3)

verfication and synthesis of communication software; 4) post-divestiture interworking of public switched *****networks*****; 5) *****multiple***** small user satellite systems; 6) advances in speech coding; 7) coding and error control; 8) topics in switching and control; 9) evaluation of computer networks; 10) trends towards digital electronics in the loop plant; 11) digital radio systems and subsystems; 12) realtime software systems; 13) satellite communication systems; 14) new switching technology/traffic procedures; 15) speech processing; and 16) communication terminals/systems.
Descriptors: CONFERENCES; TELECOMMUNICATIONS
Subject Class Header (Number):Information Generation and Promulgation, Communications and Telecommunications Systems (03.11)

23/5/36 (Item 2 from file: 202)
DIALOG(R)File 202:Information Science Abs.

00088251 8501549
ISA Document Number in Printed Publication: 8501549
Baseband LAN fine tunes token-passing technique.
Document Type: Journal Article
Author (Affiliation): Bertness, E.A. (Datapoint Corporation, San Antonio, TX 78284)
Country of Affiliation: UNITED STATES
Journal: Computer Design
Publication Language(s): English
Source: Vol. 22 Issue 12 p. 95-99 Fal 1983
When it comes to local area *****networks*****--broadband, baseband, carrier sense *****multiple***** access, token passing--the method is important only insofar as it achieves the goal. From the user's perspective, a broadband network is an obvious first choice. With a single broadband system, any office communication, be it voice, data, or video, can take place: one cable, one network, no problems. The chief drawback is that many data communication installations cannot support the high cost of broadband networking. Since present applications still run mostly digital communications, a baseband coaxial link that will plug into a broadband system with only a little modification will provide compatibility with future automated office developments such as *****video***** *****conferencing*****.
Descriptors: COMMUNICATIONS; CONFERENCING; NETWORKS; OFFICES; VIDEO
Subject Class Header (Number):Information Generation and Promulgation, Communications and Telecommunications Systems (03.11)

23/5/37 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abstracts Online1861-1996/Oct

01324449 ORDER NO: AAD93-33753
INTERACTIVE DIGITAL VIDEO COMMUNICATION IN A PACKET-SWITCHED ENVIRONMENT
Author: DOUGLAS, CHRISTOPHER PAUL
Degree: PH.D.
Year: 1993
Corporate Source/Institution: COLUMBIA UNIVERSITY (0054)
Adviser: THOMAS E. STERN
Source: VOLUME 54/07-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 3763. 230 PAGES
Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL
Descriptor Codes: 0544

Today's communications revolution has in large part been fueled by the tremendous demand for accurate timely information and all indications suggest that this demand for information is likely to continue growing in the foreseeable future. Moreover, not only is the demand for information increasing, but so are consumer expectations that this information increase be accompanied by enhanced availability of, and access to, entertainment and convenience services. In order to cope with the expected proliferation of information and other services, there is a move away from the *****multiple***** homogeneous dedicated *****networks***** that are currently in use, and toward integrated wide band packet-switched networks. Wide band packet-switched environments appear to be the solution to the service proliferation crunch as they provide highly efficient bandwidth utilization and eliminate redundancy by effectively integrating services of highly diverse bandwidths, session-times and statistics.

These new packet switched networks are more complex than their circuit-switched counterparts due to the increased probability of information loss. They are also much more sensitive to the statistics of the traffic that they transport, especially high bandwidth bursty traffic with long holding times, such as variable bit-rate video traffic. As this type of video traffic is likely to comprise a substantial fraction of any future packet-switched network, it is evident that it is essential to examine the statistics of these sources and gain some insight into the difficulties of transmitting variably coded video in the lossy medium provided by a packet-switched environment.

This thesis attempts to do just that. Several sequences of *****videoconferencing***** type video were compressed using two different variable bit-rate coders and the statistics of the resulting bit-rates were analyzed. Based on this analysis, two models for the output of a variable bit-rate video coder were proposed. The second and more tractable of the two models was then used to investigate the effects that resource allocation strategies, a priority oriented one in particular, have on the probability that information is lost. This probability is determined both analytically, using Markov modulated queueing analysis and by simulation. Finally, the distribution of the information loss was examined and the effect of this information loss on the reconstructed video signal was also investigated.

01097727 ORDER NO: AAD90-10954
GROUP COMMUNICATION IN BUS-BASED COMPUTER NETWORKS
Author: MCKINLEY, PHILIP KEITH
Degree: PH.D.
Year: 1989
Corporate Source/Institution: UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN (0090)
Source: VOLUME 50/11-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
PAGE 5175. 154 PAGES
Descriptors: COMPUTER SCIENCE
Descriptor Codes: 0984

In recent years, there has been an increase in the number of group-based applications composed of cooperative processing entities. Examples include multimedia *****teleconferencing*****, distributed databases, distributed operating system services, cooperating processes in automated control, and parallel processing. The communication among

processes in group-based applications typically involves multiple destinations and is often symmetric and temporally local.

An increasing number of *****networks***** are composed of *****multiple*****-access media, or buses. A bus-based network is one in which every communication link is a multiple-access medium. Examples of bus-based networks are found in many types of computer networks, including metropolitan area networks, interconnected local area networks, multichannel local area networks, and interconnection networks for parallel processors.

This thesis addresses the problem of supporting group communication in bus-based computer networks. The work presented in the thesis consists of two related parts. The first part addresses the problem of constructing multicast trees in bus-based networks. A multicast tree is a collection of communication links spanning the processors on which process group members reside. Messages entering the tree from one group member are routed and copied as necessary by intermediate nodes in order to be delivered to every group member. Because of the multiple-access property of the media, the problem of constructing multicast trees in bus-based networks differs fundamentally from that in point-to-point networks. In this thesis, we investigate the multicast tree construction for several classes of bus-based network topologies. For some regular topologies, we present optimal algorithms for solving the problem. In topologies for which the multicast tree problem is shown to be NP-complete, we develop and study the performance of heuristic algorithms.

The second part of the thesis addresses the problem of choosing interconnection topologies for multichannel networks. Multichannel networks consisting of several parallel, medium-speed logical channels multiplexed on a single high-speed medium offer several advantages over networks with a single high-speed channel. Permitting every node to have continuous access to every channel, however, may be prohibitively expensive, and a good deal of research has addressed the problem of how to reduce the number of transceivers per node without seriously degrading the performance of the network. We study the multichannel network connectivity problem with emphasis on supporting group communication in two classes of multichannel networks. In particular, we analyze those properties of multichannel interconnection topologies that facilitate an adaptive topology. Using these results, we develop simple protocols that use recent network traffic patterns to trigger connection changes, enabling the topology to conform to network traffic patterns and, specifically, group locality.

23/5/39 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS

1372721 NTIS Accession Number: PB89-150213/XAB
Mitsubishi Denki Giho, Vol. 62, No. 9, 1988. Special Issue: For MIND (Mitsubishi Electric Information Network Digital Technology)
Mitsubishi Electric Corp., Tokyo (Japan).
Corp. Source Codes: 076350000
c1988 111p
Languages: Japanese
Journal Announcement: GRAI8909
Text in Japanese with English abstracts. See also PB89-105209. Portions of this document are not fully legible. Color illustrations reproduced in black and white.
NTIS Prices: PC E05/MF A01
Country of Publication: Japan
Contents: Video-conferencing system; MIND network control center; MIND communication centers; Protocol-conversion equipment; The F-Port system, an

international facsimile messaging system, Present and future trends in enterprise information networks; An outline of MIND, Mitsubishi Electric's value-added network; Design of the MIND digital multiplexed network and circuit-switched network; MIND's packet-switching network; Store-and-forward facsimile mail system; Rotary-head digital audio tape (DAT) recorder mechanism; Signal-processing LSIs for multisystem color TV receivers; Satellite-communication controller for the INTELSAT business service (IBS-SAT); Narrow-band multi-channel access system; Multiple-photon type medical LINAC.

Descriptors: *Computer networks; Message processing; Information systems; Television receivers; Signal processing; Environments

Identifiers: *Foreign technology; *MIND computer network; *Local area networks; *Video conferencing; *Port system; *Electronic mail; Large scale integration; Satellite communication; Intelsat system; Digital multiplexed networks; Pacret switching; NTISDFMIT

Section Headings: 45C (Communication--Common Carrier and Satellite); 62B (Computers, Control, and Information Theory--Computer Software)

23/5/40 (Item 1 from file: 108)
DIALOG(R)File 108:Aerospace Database

01663089 A87-46276

Satellite Digital Communication Service (SDCS)

MORIHIRO, YOSHITERU; NAKASHIMA, HIROSHI; KATO, SHUZO (Nippon Telegraph and Telephone Public Corp., Radio Communications Networks Laboratories, Musashino,

Electrical Communications Laboratories, Review (ISSN 0029-067X), vol. 35, March 1987, p. 123-129.

Mar. 1987 5 REFS.

LANGUAGE: English

COUNTRY OF ORIGIN: Japan COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: JOURNAL ARTICLE

DOCUMENTS AVAILABLE FROM AIAA Technical Library

JOURNAL ANNOUNCEMENT: IAA8720

This paper presents NTT's Satellite Digital Communication Service (SDCS). Differing from conventional digital satellite communications systems offering broadband digital transmission links directly between subscribers, the SDCS offers a time division *****multiple***** access (TDMA) *****channel***** to a designated user group utilizing signaling bits with which TDMA bursts are controlled in the ON/OFF mode. This new SDCS channel assignment scheme is currently providing a loop network called the 'Multi-Access Closed Network (MAC-Net)'. Particular focus is placed in the paper on its configuration and subscriber/SDCS system interface conditions (Author)

SOURCE OF ABSTRACT/SUBFILE: AIAA

DESCRIPTORS: *COMMUNICATION NETWORKS; *PULSE COMMUNICATION; *SATELLITE COMMUNICATION; *TIME DIVISION MULTIPLE ACCESS; DATA TRANSMISSION; MAN-COMPUTER INTERFACE; OFF-ON CONTROL; RANDOM ACCESS; *****TELECONFERENCING*****

SUBJECT CLASSIFICATION: 8732 Communications & Radar (1987-)

23/5/41 (Item 2 from file: 108)
DIALOG(R)File 108:Aerospace Database

01374337 A83-19651

PTC '82; Proceedings of the Pacific Telecommunications Conference,

Honolulu, HI, January 17-20, 1982
WEDEMEYER, D. J., (ED.) (Hawaii, University, Manoa, HI)
Conference sponsored by IEEE, University of Hawaii, Department of Planning and Economic Development of Hawaii, et al. Honolulu, HI, Pacific Telecommunications Council, 1982. 297 p (For individual items see A83-19652 to A83-19655)
1982
LANGUAGE: English
COUNTRY OF PUBLICATION: United States
DOCUMENT TYPE: CONFERENCE PROCEEDINGS
JOURNAL ANNOUNCEMENT: IAA8307
Basic, developing, and future telecommunications services in the Pacific area are discussed with regard to technical considerations, business and user applications, and policy and planning considerations. Particular attention is given to topology considerations for *****multiple***** access/broadcasting radio *****networks*****, the evolution of integrated pack and circuit switching technology, data compression applied to *****video***** *****conferencing*****, commercial satellite communications for developing areas of the Pacific, and policy implications of future telecommunications services. The Chilean telecommunications system, telecommunications services in the Phillipines, the structure of Alaskan telecommunications, the Australian National Satellite System, telecommunications in the Fiji Islands, and data communications in Taiwan are considered. (B.J.)
SOURCE OF ABSTRACT/SUBFILE: AIAA
DESCRIPTORS: *COMMUNICATION NETWORKS; *CONFERENCES; *PACIFIC ISLANDS; *SPACECRAFT COMMUNICATION; ATS 1; AUSTRALIA; BROADCASTING; DEVELOPING NATIONS; DOMESTIC SATELLITE COMMUNICATIONS SYSTEMS; ECONOMIC FACTORS; INTELSAT SATELLITES; MULTIPLE ACCESS; PROJECT PLANNING; RADIO COMMUNICATION ; SATELLITE NETWORKS; SATELLITE TRANSMISSION; TECHNOLOGY ASSESSMENT
SUBJECT CLASSIFICATION: 7532 Communications (1975-)

23/5/42 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

11311095 PASCAL No.: 94-0131717
FM-C100L: a multimedia communication adaptor for LANs
ISHIBASHI S; KOBAYASHI M
Journal: NTT review, 1993, 5 (6) 48-50
ISSN: 0915-2334 Availability: INIST-10137; 354000024505840060
Document Type: P (Serial) ; A (Analytic)
Country of Publication: Japan
Language: English
*****Videoconferencing***** is fast becoming attractive to many potential users as the variety of available equipment increases and the price of that equipment decreases. In the spring of 1993, NTT started selling a new type of *****videoconferencing***** system called the FM-C100L. This new audio-visual *****teleconferencing***** system has been designed for conventional Ethernet LANs (10 Mb/s CSMA/CD). One full terminal costs less than = 1 million, which is inexpensive when compared with other conferencing systems designed for use with ISDN. The following describes the FM-C100L system, including its features and future expandability

English Descriptors: Local network; Integrated services digital *****network*****; Multimedia; Adaptor; *****Multiple***** access; Costs; Videocommunication; *****Videoconference*****
French Descriptors: Reseau local; Reseau numerique integration services; Multimedia; Adaptateur; Acces multiple; Cout; Videocommunication;

*****Videoconference*****

Classification Codes: 001D04B06C

23/5/43 (Item 2 from file: 144)
DIALOG(R)File 144:Pascal

07785008 PASCAL No.: 87-0264666
Analysis of a hybrid (demand assignment TDMA) protocol for video *****teleconferencing*****-voice data optical networks
ELHAKEEM A K; GRELA-M'POKO B; MUSTAFA ALI; HAYES J F
Concordia univ., dep. electrical eng., Montreal PQ H3G 1M8, Canada
Journal: Computer networks and ISDN systems, 1986, 11 (3) 219-241
ISSN: 0169-7552 Availability: CNRS-17220
No. of Refs.: 6 ref.
Document Type: P (Serial) ; A (Analytic)
Country of Publication: Netherlands
Language: ENGLISH

English Descriptors: Telecommunication network; Local *****network*****; *****Teleconference*****; *****Videoconference*****; Time division *****multiple***** access; Data transmission

French Descriptors: Reseau telecommunication; Reseau local; *****Teleconference*****; *****Videoconference*****; Acces multiplexage temps; Transmission donnee

Classification Codes: 001D04L

23/5/44 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

01789017 JICST ACCESSION NUMBER: 93A0499585 FILE SEGMENT: JICST-E
Multiple Destination Routing Algorithms.
TANAKA Y (1); HUANG P C (1)
(1) Univ. Tokyo, Tokyo, JPN
IEICE Trans Commun(Inst Electron Inf Commun Eng), 1993, VOL.E76-B,NO.5, PAGE.544-552, FIG.16, REF.19
JOURNAL NUMBER: L1369AAW ISSN NO: 0916-8516
UNIVERSAL DECIMAL CLASSIFICATION: 621.394.74
LANGUAGE: English COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication
ABSTRACT: With the arrival of B-ISDN, point-to-point routing alone is no longer adequate. A new class of computer and video related services, such as mass mailing, TV broadcasting, *****teleconferencing*****, and video 900 service, requires the *****network***** to handle *****multiple***** destination routing (MDR). Multiple destination routing enables widespread usage of multipoint services at a lower cost than networks using point-to-point routing. With tihs in mind, network providers are researching more into MDR algorithms. However, the MDR problem itself is very complex. Furthermore, its optimal solution, the Steiner tree problem, is NP-complete and thus not suitable for real-time applications. Recently, various algorithms which approximate

the Steiner tree problem have been proposed and, in this invited paper, we will summarize the simulation results of these algorithms. But first, we will define the MDR problem, the issues involved, and the benchmark used to compare MDR algorithms. Then, we will categorize the existing MDR algorithms into a five-level classification tree. Lastly, we will present various published results of static algorithms and our own simulation results of quasi-static algorithms. (author abst.)
DESCRIPTORS: wide band; digital communication; integrated communication network; routing; simultaneous transmission; mass communication; algorithm; graph theory
BROADER DESCRIPTORS: bandwidth; communication system; method; communication network; information network; network; selection; communication operation; operation(processing); communication; mathematics; theory
CLASSIFICATION CODE(S): ND07030A

23/5/45 (Item 2 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00759408 JICST ACCESSION NUMBER: 89A0006970 FILE SEGMENT: JICST-E
Routing to *****multiple***** destinations in telecommunication *****network*****.
TANAKA AKIRA (1); MIZUSAWA JUN-ICHI (1)
(1) NTT Kokanshisutemuken
Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National Convention Record, the Institute of Electronics, Information and Communication Engineers), 1988, VOL.1988,NO.Autumn Pt. B-2, PAGE.B.2.23, FIG.4, TBL.1, REF.3
JOURNAL NUMBER: G0508ADY
UNIVERSAL DECIMAL CLASSIFICATION: 621.395.33/.38
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
ARTICLE TYPE: Short Communication
DESCRIPTORS: telephone; *****teleconference*****; multiple access communication; routing; algorithm; link connecting; traffic processing; circuit exchanging; exchange system; economy(efficiency
BROADER DESCRIPTORS: voice communication; telecommunication; conference; communication system; method; selection; communication operation; operation(processing); link operating; connection; treatment; communication exchanging; exchange; switching; communication apparatus; equipment; property
CLASSIFICATION CODE(S): ND11020E

23/5/46 (Item 3 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00746274 JICST ACCESSION NUMBER: 88A0577767 FILE SEGMENT: JICST-E
A study on ISDN advanced services.
YAMAGUCHI KATSUYOSHI (1); KAMATA HAJIME (1); ARITAKA NORIHIRO (1); MORITA SHUZO (1)
(1) Fujitsu Labs. Ltd.
Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku, 1988, VOL.88,NO.29, PAGE.1-6(IN88-20), FIG.12, REF.5
JOURNAL NUMBER: S0532BBG
UNIVERSAL DECIMAL CLASSIFICATION: 621.394/.395
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper
ABSTRACT: We must consider that ISDN will involve three integrations: media, functional, and user-interface integration. With this understanding, we have developed *****teleconferencing*****, multimedia mail, and electronic secretary services which make use of two strong points of ISDN: a "clean" B channel and advanced D *****channel***** signaling. Multimedia communication using *****multiple***** digitized B *****channels***** can be applied in both realtime communication service (*****teleconferencing*****), and store/forward service (multimedia mail service). The D channel allows user network control and provides users with customized services such as the electronic secretary service. In this paper, the basic concept of these services, and the experimental ISDN system for evaluating them are described.(author abst.)
DESCRIPTORS: digital communication; integrated communication network; PBX(exchange); special purpose processor; *****teleconference*****; packet switching; duplex communication; data communication; voice communication; picture communication; system design; telecommunication
BROADER DESCRIPTORS: communication system; method; communication network; information network; network; subscriber equipment; communication equipment; facility; hardware; conference; store-and-forward switching; communication exchanging; exchange; switching; design
CLASSIFICATION CODE(S): ND11010T

File 2:INSPEC 1969-1996/Oct W3
(c) 1996 Institution of Electrical Engineers
File 8:Ei Compendex(R) 1970-1996/Nov W1
(c) 1996 Engineering Info. Inc.
File 14:Mechanical Engineering Abs 1973-1996/Nov
(c) 1996 Cambridge Sci Abs
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(c) 1996 Inst for Sci Info
File 7:Social SciSearch(R) 1972-1996/Oct W3
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File 439:Arts&Humanities Search(R) 1980-1996/Oct W3
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Set	Items	Description
S1	15052	(TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-IDEOTELECONFERENC?
S2	10862	S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-25)

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S3          10   S2 AND (VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHANG-
               ?)
S4          38   S2 AND ((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(PAL
              OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTEM))
S5         107   S1 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR
              CHANNEL?)
S6          69   S2 AND (SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? OR
              CHANNEL?)
S7          65   S2 AND ((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?)) AND (-
              NETWORK?(N10)(AUDIO OR VIDEO)))
S8           0   S3 AND S4 AND S6 AND S7
S9           0   S3 AND S4 AND S6
S10          0   S3 AND S6 AND S7
S11          0   S3 AND (S4 OR S6 OR S7)
S12          5   RD S3 (unique items)
S13          0   S4 AND S6 AND S7
S14          2   S4 AND (S6 OR S7)
S15          2   RD S14 (unique items)
S16         36   S4 NOT (S3 OR S14)
S17         27   RD S16 (unique items)
S18          2   (S6 AND S7) NOT (S3 OR S14 OR S16)
S19          2   RD S18 (unique items)
S20         68   S6 NOT (S3 OR S14 OR S16 OR 18)
S21         47   RD S20 (unique items)
S22         66   S6 NOT (S3 OR S14 OR S16 OR S18)
S23         46   RD S22 (unique items)
S24         62   S7 NOT (S3 OR S14 OR S16 OR S18 OR S22)
S25         51   RD S24 (unique items)

 25/5/1     (Item 1 from file: 2)
DIALOG(R)File   2:INSPEC
(c) 1996 Institution of Electrical Engineers. All rts. reserv.

4794289   INSPEC Abstract Number: B9411-6210P-020
  Title: Development of multipoint *****teleconference***** system using
multipoint control unit (MCU)
  Author(s): Arakaki, T.; Kenmoku, E.; Ishida, T.; Sawai, M.
  Author Affiliation: NEC Corp., Tokyo, Japan
  Part vol.1    p.132-7 vol.1
  Editor(s): Savage, J.G.; Wedemeyer, D.J.
  Publisher: Pacific Telecommun. Council, Honolulu, HI, USA
  Publication  Date: 1993    Country of Publication: USA    2 vol. xvi+1064
 pp.
  Conference   Title:   Proceedings   of   15th   Pacific   Telecommunications
Conference (PTC '93)
  Conference  Date:  17-20 Jan. 1993    Conference Location: Honolulu, HI,
USA
  Language: English    Document Type: Conference Paper (PA)
  Treatment: New Developments (N); Practical (P)
  Abstract: This multipoint *****teleconference***** system can be used for
*****teleconferences***** with motion pictures, documents, VCRs, and audio.
The system is comprised of a multipoint control unit (MCU), master
controller (MAST CONT), and multiple conference terminals (visualinks AD
series). The multiple conference terminals located in remote locations are
connected by *****video*****, *****audio*****, and *****data***** multiplex
transmission *****digital***** lines in a radial *****network***** with the
MCU and MAST CONT in the center. Each MCU can connect up to 8 locations and
can simultaneously handle the multipoint *****teleconferences***** of two
groups that are independent of each other. (The MCU can connect up to 14
locations using a cascade connection.) This system provides functions that
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enable all participants at all locations to see the video of a person speaking. It also provides various modes which allow video selection at any location and automatic screen switching to the video of the person speaking. Also, audio functions can be selected for simultaneous discussions at all participating locations. The multipoint *****teleconference***** system is much more effective than conventional point-to-point *****teleconference***** systems. (3 Refs)
Descriptors: digital communication systems; multiplexing; multiplexing equipment; *****teleconferencing*****; visual communication; voice communication
Identifiers: multipoint *****teleconference***** system; multipoint control unit; MCU; motion pictures; documents; VCR; master controller; MAST CONT; multiple conference terminals; visualinks AD series; remote locations ; multiplex transmission digital lines; radial network; video selection; automatic screen switching; audio functions; simultaneous discussions
Class Codes: B6210P (Teleconferencing); B6230 (Switching centres and equipment)

25/5/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

4527057 INSPEC Abstract Number: B9401-6210P-001, C9401-7104-003
Title: DECspin: a networked desktop *****videoconferencing***** application
Author(s): Palmer, L.G.; Palmer, R.S.
Journal: Digital Technical Journal vol.5, no.2 p.65-76
Publication Date: Spring 1993 Country of Publication: USA
CODEN: DTJOEL ISSN: 0898-901X
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: The Sound Picture Information Networks (SPIN) technology that is part of the DECspin version 1.0 product takes *****digitized***** audio and *****video***** from desktop computers and distributes this *****data***** over a *****network***** to form real-time conferences. SPIN uses standard local and wide area data networks, adjusting to the various latency and bandwidth differences, and does not require a dedicated bandwidth allocation. A high-level SPIN protocol was developed to synchronize *****audio***** and video *****data***** and thus alleviate *****network***** congestion. SPIN performance on *****Digital***** 's hardware and software platforms results in sound and pictures suitable for carrying on personal communications over a data network. The Society of Technical Communication chose the DECspin version 1.0 application as a first-place recipient of the Distinguished Technical Communication Award in 1992. (9 Refs)
Descriptors: local area networks; protocols; *****teleconferencing*****; wide area networks
Identifiers: DECspin; networked desktop *****videoconferencing*****; Sound Picture Information Networks; SPIN; real-time conferences; wide area data networks; local area data networks; latency; bandwidth; high-level SPIN protocol; Digital's hardware and software
Class Codes: B6210P (Teleconferencing); C7104 (Office automation); C7410F (Communications); B6150M (Protocols); B6210L (Computer communications); C5640 (Protocols); C5620L (Local area networks); C5620W (Other networks)

25/5/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

4461735 INSPEC Abstract Number: B9309-6210P-003
Title: Ocean-going ship support using multimedia *****teleconferencing***** via satellite
Author(s): Kyrtatos, N.P.
Author Affiliation: Nat. Tech. Univ. of Athens, Greece
Journal: Electronics & Communication Engineering Journal vol.5, no.3 p.198-208
Publication Date: June 1993 Country of Publication: UK
ISSN: 0954-0695
U.S. Copyright Clearance Center Code: 0954-0695/93/$7.50+.00
Language: English Document Type: Journal Paper (JP)
Treatment: Experimental (X)
Abstract: The opportunities offered by advances in shore-based communication networks, satellites and ship-board equipment may be significant for the future operating practices of the marine industry. The use of advanced telecommunications, such as high *****data*****-rate land *****networks***** and satellite links, allows the transmission of *****digitised***** moving *****video*****, voice and computer *****data*****, to support applications such as multimedia conferencing and computer interworking. These facilities can be used for the remote support of ships' crews from land-based agencies. A series of experiments conducted within a large-scale project on the use of advanced communications in the marine industry demonstrated multimedia conferencing between a specially equipped ship and shore-based organisations. In the case of a serious technical problem on the ship, it was shown how experts at the shipping company and other locations could use such facilities for remote inspection, problem diagnosis, advice, co-operative decision-making and supervision of the repair procedure. (10 Refs)
Descriptors: marine systems; multimedia systems; satellite relay systems; *****teleconferencing*****
Identifiers: ocean going ship support; cooperative decision making; multimedia *****teleconferencing*****; shore-based communication networks; ship-board equipment; marine industry; high data-rate land networks; satellite links; digitised moving video; voice; computer data; computer interworking; land-based agencies; large-scale project; remote inspection; problem diagnosis; supervision; repair procedure
Class Codes: B6210P (Teleconferencing)

25/5/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

4455603 INSPEC Abstract Number: B9309-6250G-020
Title: Intermediate data rate terminal for satellite telecommunications
Author(s): Karas, A.; Lemaitre, D.; Imbeaux, J.C.
Author Affiliation: Alcatel Telspace, Velizy, France
Journal: Commutation & Transmission vol.15, no.2 p.63-70
Publication Date: 1993 Country of Publication: France
CODEN: COTNDL ISSN: 0242-1283
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Intermediate data rate standard satellite transmission networks are essentially designed to offer an international public switched telephone service meeting ISDN requirements. Specific national and international applications are also possible, including telephone, *****data***** transmission, *****digital***** television and *****video***** *****conferencing***** . Alcatel Telspace has achieved

terminals compatible with those *****networks***** and intermediate data rate specifications, in first at 64 kbit/s to 8 Mbit/s, and is presently developing an 8 to 45 Mbit/s terminal. (7 Refs)
Descriptors: data communication equipment; modems; satellite ground stations; satellite relay systems
Identifiers: intermediate data rate terminal; modem; terrestrial interface module; satellite telecommunications; Alcatel Telspace; 64 kbit/s to 8 Mbit/s; 8 to 45 Mbit/s
Class Codes: B6250G (Satellite relay systems); B6220W (Other stations)
Numerical Indexing: bit rate 6.4E+04 to 8.0E+06 bit/s; bit rate 8.0E+06 to 4.5E+07 bit/s

25/5/5 (Item 5 from file: 2)
DIALOG(R)File 2:INSPEC

04213760 INSPEC Abstract Number: B9209-6210P-009, C9209-6150N-029
Title: Distributed desktop conferencing system (MERMAID) based on group communication architecture
Author(s): Maeno, K.; Sakata, S.; Ohmori, T.
Author Affiliation: NEC Corp., Kanagawa, Japan
Conference Title: ICC 91. International Conference on Communications Conference Record (Cat. No.91CH2984-3) p.520-5 vol.1
Publisher: IEEE, New York, NY, USA
Publication Date: 1991 Country of Publication: USA 3 vol. xxix + 1755 pp.
ISBN: 0 7803 0006 8
U.S. Copyright Clearance Center Code: CH2984-3/91/0000-0520$01.00
Conference Sponsor: IEEE
Conference Date: 23-26 June 1991 Conference Location: Denver, CO, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Applications (A); Practical (P)
Abstract: A distributed multiparty desktop conferencing system called MERMAID is described. This system allows a group of users, seated at their desks, to conduct a meeting from their personal computers (PC). Participants can jointly view and process multimedia conference documents, including text, graphics, scanned images, and handwritten figures they are sharing, and they can simultaneously interchange voice and *****video***** images through ISDN (integrated services *****digital***** *****network*****) and high speed *****data***** network, etc. MERMAID is implemented using OS/2-based PCs with electronic writing pads, image scanners, microphone-installed loudspeakers, video cameras, etc. MERMAID is designed based on the group communication architecture, a framework for supporting group cooperative work in a distributed environment. It consists of two models: a function model, which defines hierarchically structured service functions, and a system model, which provides client-server model-based service interfaces and multimedia communication protocols. (6 Refs)
Descriptors: distributed processing; groupware; ISDN; microcomputer applications; multimedia systems; *****teleconferencing*****
Identifiers: distributed desktop conferencing system; OS/2; voice communication; group communication architecture; MERMAID; personal computers; multimedia conference documents; text; graphics; scanned images; handwritten figures; video images; ISDN; integrated services digital network; high speed data network; electronic writing pads; image scanners; microphone-installed loudspeakers; video cameras; group cooperative work; distributed environment; function model; hierarchically structured service functions; system model; client-server model-based service interfaces; multimedia communication protocols

Class Codes: B6210P (Teleconferencing); B6210M (ISDN); C6150N (Distributed systems); C6160Z (Other DBMS); C5620 (Computer networks and techniques); C7410F (Communications)

25/5/6 (Item 6 from file: 2)
DIALOG(R)File 2:INSPEC

04099145 INSPEC Abstract Number: B9204-6210M-026
Title: Corporate networking applications
Author(s): Rubinstein, C.B.; Ryva, G.J.; Warwick, P.S.
Author Affiliation: Dept. of Human Factors, AT&T Bell Labs., Lincroft, NJ, USA
Journal: AT&T Technical Journal vol.70, no.5 p.27-35
Publication Date: Sept.-Oct. 1991 Country of Publication: USA
CODEN: ATJOEM ISSN: 8756-2324
Language: English Document Type: Journal Paper (JP)
Treatment: Applications (A)
Abstract: Digital connectivity and integrated services *****digital***** *****network***** (ISDN) functionalities offer ways to bring new voice, *****data*****, and *****video***** applications to corporate *****network***** users. ISDN virtual private *****networks***** allow both small and large corporations to offer these applications to their users. Corporate network telephone users can have station and messaging features that were previously available only to users on the same private branch exchange (PBX). Remote access to centralized computers from personal computers (PCs) and computing resources associated with local area networks (LANs) are now available over digital corporate networks. *****Videoconferences***** can be arranged on demand on corporate networks between domestic and international locations. The authors describe current applications of modern corporate networks, and discuss some emerging applications that can be realized by ISDN. (4 Refs)
Descriptors: ISDN; local area networks; *****teleconferencing*****
Identifiers: ISDN applications; *****videoconferencing*****; voice data video applications; LAN; computer resource access; integrated services digital network; local area networks; corporate networks
Class Codes: B6210M (ISDN); B6210L (Computer communications); B6210P (Teleconferencing)

25/5/7 (Item 7 from file: 2)
DIALOG(R)File 2:INSPEC

03916305 INSPEC Abstract Number: B91046686
Title: *****Video***** quality gradient measures for digital *****networks*****
Author(s): Quincy, E.A.
Author Affiliation: US Dept. of Commerce, Boulder, CO, USA
Conference Title: MILCOM 90. A New Era. 1990 IEEE Military Communications Conference. Conference Record (Cat. No.90CH2831-6) p.289-96 vol.1
Publisher: IEEE, New York, NY, USA
Publication Date: 1990 Country of Publication: USA 3 vol. (xxvi+1294) pp.
U.S. Copyright Clearance Center Code: CH2831-6/90/0000-0289$01.00
Conference Sponsor: IEEE; Armed Forces Commun. Electron. Assoc.; U.S. Dept. Defense
Conference Date: 30 Sept.-3 Oct. 1990 Conference Location: Monterey, CA, USA

Language: English Document Type: Conference Paper (PA)
Treatment: Theoretical (T); Experimental (X)
Abstract: Two of the most significant video quality degradations produced by digital compression in codecs are image blurring and distortion of edges in areas of motion. These degradations become more evident at reduced transmission rates. Two objective measures of video quality, one based on Laplacian and the other on Sobel gradient operators, are proposed. They are validated with desktop *****video***** *****teleconferencing***** (VTC) *****data***** for *****digital***** *****networks***** with sequences containing significant motion and complex detail. The measured results are compared over a range of transmission bit rates. The sensitivity and reliability of the measures are enhanced by determining the optimum Gray level thresholds for computing the measures. Both measures correlate well with transmission rate and subjective opinion of the video quality, particularly for blurring. (12 Refs)
Descriptors: codecs; digital communication systems; picture processing; telecommunication networks; *****teleconferencing*****; video signals
Identifiers: picture processing; edge distortion; Laplacian operator; gradient measures; digital networks; video quality degradations; digital compression; codecs; image blurring; transmission rates; objective measures ; Sobel gradient operators; desktop video *****teleconferencing*****; bit rates; sensitivity; reliability; Gray level thresholds
Class Codes: B6210P (Teleconferencing); B6430J (Applications of television systems); B6140C (Optical information processing); B6220 (Stations and equipment)

25/5/8 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC

03870885 INSPEC Abstract Number: D91001335
Title: This is the world calling (ISDN)
Author(s): Breeze, P.
Journal: ICL Today vol.6, no.5 p.38, 41
Publication Date: Feb. 1991 Country of Publication: UK
CODEN: ICLTEG ISSN: 0268-5957
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Integrated Services Digital Network, ISDN, is now available in the UK over the public telephone network and with it comes a major change in business communications. ISDN, is a complete *****digital***** telephone service. It provides *****digital***** transmission of voice, *****data***** and image information from one user to another without the need to use devices such as a modem. *****Video***** phones and *****video***** *****conferencing*****, Group 4 fax and virtual private *****networks***** are all now possible, not to mention enhanced telephone facilities such as caller identification on incoming calls, and relocation of calls over the public network. (0 Refs)
Descriptors: data communication systems; ISDN; telecommunication networks
Identifiers: international business communication; integrated Services Digital Network; video phones; call relocation; UK; public telephone network; ISDN; digital telephone service; digital transmission; voice; data ; image; *****video***** *****conferencing*****; Group 4 fax; private networks; caller identification
Class Codes: D4000 (Office automation - communications)

25/5/9 (Item 9 from file: 2)
DIALOG(R)File 2:INSPEC

03854323 INSPEC Abstract Number: B91027149, C91024482
Title: The use of LIVE-NET for online education and training
Author(s): Buxton, A.; Dibley, S.; Yeadon, J.
Author Affiliation: London Univ., UK
Conference Title: Online Information 90. 14th International Online Information Meeting. Proceedings p.91-5
Editor(s): Raitt, D.I.
Publisher: Learned Information, Oxford, UK
Publication Date: 1990 Country of Publication: UK xii+531 pp.
ISBN: 0 904933 75 X
Conference Date: 11-13 Dec. 1990 Conference Location: London, UK
Language: English Document Type: Conference Paper (PA)
Treatment: Applications (A); Practical (P)
Abstract: LIVE-NET is a *****teleconferencing***** system linking eight sites of the University of London. It operates over a fibre-optic star *****network*****, with each link carrying four *****video***** channels and a *****digital***** *****data***** channel. People in each studio are able to participate in lectures or demonstrations in a fully interactive way without having to travel between sites. The Online Working Group of the LIVE-NET Library User's Group is concerned with exploring the use of the network to educate both library staff and other members of the university in the potential and practice of online information retrieval. The data channel is used to show the screen display, and the video channels are used to show the demonstrator, printed materials such as thesauri and indexes, and the audience at each site. A possible development is using the connection between LIVE-NET and the Olympus satellite for giving online and CD-ROM demonstrations and training across Europe. (9 Refs)
Descriptors: information retrieval; *****teleconferencing*****; training
Identifiers: LIVE-NET; online education; training; *****teleconferencing***** system; University of London; fibre-optic star network; video channels; *****digital***** *****data***** channel; library staff; online information retrieval; screen display; demonstrator; printed materials; thesauri; indexes; audience; Olympus satellite
Class Codes: B6210P (Teleconferencing); C7260 (Information science education)

25/5/10 (Item 10 from file: 2)
DIALOG(R)File 2:INSPEC

03832439 INSPEC Abstract Number: B91019699
Title: Low data rate video communications
Author(s): Taylor, P.C.
Conference Title: IEEE International Conference on Communications ICC '90 Including Supercomm Technical Sessions. SUPERCOMM ICC '90 Conference Record (Cat. No.90CH2829-0) p.1612-16 vol.4
Publisher: IEEE, New York, NY, USA
Publication Date: 1990 Country of Publication: USA 4 vol. xxx+1759 pp.
U.S. Copyright Clearance Center Code: CH2829-0/90/0000-1612$1.00
Conference Sponsor: IEEE; US Telephone Assoc.; Telecommun. Ind. Assoc
Conference Date: 16-19 April 1990 Conference Location: Atlanta, GA, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Applications (A); Practical (P)
Abstract: It is pointed out that progress in technology is resulting in a greater coverage of *****digital***** *****data***** communication systems,

as well as vast increases in the processing power of integrated circuits, particularly for video and data processing. The author describes the methods of motion *****video***** communication over integrated services *****digital***** *****networks***** and other low-*****data***** -rate links resulting from these advances in technology. Three main areas are covered: *****video***** *****conferencing*****, video telephony, and video surveillance. The different criteria for these areas are described, together with solution techniques and implementations. Associated topics, such as world standards and additional features and facilities, are also discussed. (3 Refs)
Descriptors: data compression; ISDN; *****teleconferencing*****; videotelephony; visual communication
Identifiers: ISDN; processing power; integrated circuits; motion video communication; integrated services digital networks; low-data-rate links; *****video***** *****conferencing*****; video telephony; video surveillance ; criteria; implementations; world standards
Class Codes: B6210M (ISDN); B6210P (Teleconferencing); B6430J (Applications of television systems); B6210D (Telephony)

25/5/11 (Item 11 from file: 2)
DIALOG(R)File 2:INSPEC

03796360 INSPEC Abstract Number: D91000504
Title: *****Network***** *****audio***** bridges handle conference call needs
Author(s): Gold, E.M.
Journal: Networking Management vol.8, no.4 p.52
Publication Date: April 1990 Country of Publication: USA
ISSN: 0746-6072
Language: English Document Type: Journal Paper (JP)
Treatment: Applications (A)
Abstract: A bridge is a piece of equipment that allows people at several different locations to be on the same telephone call at one time. Bridges today are very sophisticated. They offer features such as full-duplex voice, allowing two or more people to speak and be heard at the same time. They can hold and manage several conference calls simultaneously. They can link as few as three locations or as many as 3000 locations together for a conference call. Many are *****digital***** , having interfaces for T1 circuits. With the increasing reliance on *****data*****, some bridges can be used to share *****digital***** information between PCs. Some can even be used for full-motion *****videoconference***** calls. (0 Refs)
Descriptors: *****teleconferencing*****
Identifiers: personal computers; *****network***** *****audio***** bridges; *****teleconferencing*****; full-duplex voice; conference calls; T1 circuits; full-motion *****videoconference***** calls
Class Codes: D4060 (Teleconferencing)

25/5/12 (Item 12 from file: 2)
DIALOG(R)File 2:INSPEC

03697606 INSPEC Abstract Number: D90002200
Title: Face to face, via ISDN
Journal: ABA Banking Journal vol.82, no.5 p.92, 95
Publication Date: May 1990 Country of Publication: USA
CODEN: ABAJD5 ISSN: 0194-5947
Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)
Abstract: The distance between Pittsburgh and Philadelphia might not seem all that vast, but for Mellon Bank it was too far and too expensive. The costs of roundtrip airfare and related expenses for sending bankers from Mellon's Pittsburgh headquarters to its Philadelphia office for meetings lasting one or two hours began to resemble a classic situation of the costs outweighing the benefits. However, Mellon believes it has a solution to this dilemma-low-cost *****videoconferencing***** that uses the emerging technology called integrated services *****digital***** *****network***** (ISDN). This technology transmits *****data*****, voice, and *****video***** communications over a single telephone line. The bank's success with a recent year-long pilot test suggests that Mellon's answer is only a phone call away. (0 Refs)
Descriptors: banking; ISDN; *****teleconferencing*****
Identifiers: ISDN; Mellon Bank; low-cost *****videoconferencing*****
Class Codes: D2050E (Banking); D4060 (Teleconferencing)

25/5/13 (Item 13 from file: 2)
DIALOG(R)File 2:INSPEC

03491291 INSPEC Abstract Number: B89071914, C89067653
Title: *****Video***** and data communication via the prototype broadband *****network***** (VBN)
Author(s): Pernsteiner, P.; Brendel, F.
Journal: NTZ vol.42, no.8 p.486-93
Publication Date: Aug. 1989 Country of Publication: West Germany
CODEN: NNTZDZ ISSN: 0027-707X
Language: German Document Type: Journal Paper (JP)
Treatment: Applications (A); Practical (P)
Abstract: The authors report on the scope of video and data services offered by the direct-dial prototype broadband optical-fibre *****network***** (VBN) (replacing the old experimental *****video*****-*****conferencing***** *****network***** in Feb. 1989). They describe the format of the 140 Mbit/s signal frame, a subscriber terminal, a broadband PABX switching centre (called MegaSwitch), multifunctional video workstations, *****digital***** television graphics, sending pictures, automatically setting-up *****data***** connections (especially fast links) and tariff rates. They give particular emphasis to the architecture within the VBN and to performance figures such as data rates, image resolution and compatibility. (0 Refs)
Descriptors: broadband networks; data communication systems; optical fibres; optical links; video signals
Identifiers: video communication; video services; signal frame format; broadband PABX switching centre; data communication; prototype broadband network; data services; optical-fibre network; subscriber terminal; MegaSwitch; video workstations; digital television graphics; tariff rates; data rates; image resolution; compatibility; 140 Mbit/s
Class Codes: B6260 (Optical links and equipment); B4125 (Fibre optics); B6210 (Telecommunication applications); B6430 (Television equipment, systems and applications); C5620 (Computer networks and techniques)
Numerical Indexing: bit rate 1.4E+08 bit/s

25/5/14 (Item 14 from file: 2)
DIALOG(R)File 2:INSPEC

03159543 INSPEC Abstract Number: D88001997

Title: Making the most of *****video***** *****conferencing*****
Author(s): Casey, C.
Journal: Electronics Times no.452 p.29
Publication Date: 21 April 1988 Country of Publication: UK
CODEN: ELTIE8 ISSN: 0142-3118
Language: English Document Type: Journal Paper (JP)
Treatment: Applications (A); General, Review (G)
Abstract: *****Video***** *****conferencing***** has burst out of the studio and into the real world, thanks to the shrinking size of the latest electronics and the plummeting cost of systems. Portable cameras and mobile satellite links have enabled *****videoconferencing***** facilities to be used as communications systems for disaster relief in Italy, to teach children in the remotest outback of Australia, and even to cross-examine witnesses who cannot make it to court. All of these applications have been made possible, according to GEC which is involved in many of the projects, because technology advances have cut the cost of cameras, improved *****video***** processing and *****digital***** networks. GEC Plessey Telecommunications, *****Video***** and *****Data***** Products reckons that *****video***** *****conferencing***** is on the verge of a boom period. Its business is now worth about Pounds 10 million, covering video transmission, modems and X25 products. (0 Refs)
Descriptors: *****teleconferencing*****
Identifiers: portable cameras; *****video***** *****conferencing*****; mobile satellite links; *****videoconferencing*****; disaster relief; GEC; video processing; digital networks
Class Codes: D4060 (Teleconferencing)

25/5/15 (Item 15 from file: 2)
DIALOG(R)File 2:INSPEC

03112903 INSPEC Abstract Number: B88028769
Title: Construction of Tokyo Earth station
Author(s): Nagata, H.; Inagaki, K.; Nakamura, T.
Journal: KDD Technical Journal no.133 p.279-83
Publication Date: July 1987 Country of Publication: Japan
CODEN: KTNKAY ISSN: 0452-3431
Language: Japanese. Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Digitalization of the INTELSAT satellite system was initiated by the introduction of the SCPC/PSK (single channel per carrier/phase shift keying) system, which was followed by the TDMA/DSI (time division multiple access/digital speech interpolation) system, aiming to increase transmission capacity and improve the efficiency of satellite use in the area of the Atlantic Ocean and the Indian Ocean. In parallel with this, INTELSAT started the INTELSAT Business Service in 1983 in order to meet with the demands for low-cost *****digital***** communication with integrated services of speech, *****data***** and graphic information. The Tokyo Earth station was constructed in December, 1986 to satisfy the demands for high-speed code items for international *****network***** services or *****video***** conference services, mainly in Tokyo metropolitan areas, by using IBS. (0 Refs)
Descriptors: digital communication systems; ISDN; multi-access systems; phase shift keying; satellite ground stations; telecommunication networks; *****teleconferencing*****; time division multiplexing
Identifiers: Tokyo Earth station; INTELSAT satellite system; SCPC/PSK; single channel per carrier/phase shift keying; TDMA/DSI; time division multiple access/digital speech interpolation; transmission capacity; Atlantic Ocean; Indian Ocean; INTELSAT Business Service; low-cost digital

communication; integrated services; speech; data; graphic information; high-speed code items; international network services; video conference services
Class Codes: B6210M (ISDN); B6210P (Teleconferencing); B6250G (Satellite relay systems)

25/5/16 (Item 16 from file: 2)
DIALOG(R)File 2:INSPEC

03106890 INSPEC Abstract Number: B88028487, D88001240
Title: The desktop options for integrating voice and data
Author(s): Hofferber, M.
Journal: The Office vol.107, no.2 p.71-3
Publication Date: Feb. 1988 Country of Publication: USA
CODEN: OFISAD ISSN: 0030-0128
Language: English Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: Telephones are now available to transmit and receive not just words, but data, text, photographs, computer programs and *****video***** imagery. They can even be linked together in *****networks***** that allow for simultaneous communication in two or more of these media. Some of these products are undoubtedly oversold and underused, but others are truly effective tools for integrating the vocal communication of the worker with the *****digitized***** *****data***** of the computer. Tied into a PBX or some other multiuser system, a host of features and options become available. They include voice mail, shared access, unattended messaging and *****videoconferencing*****. (0 Refs)
Descriptors: executive workstations; ISDN; voice mail
Identifiers: desktop telephones; voice data integration; text; photographs; computer programs; video imagery; networks; vocal communication; *****digitized***** *****data*****; PBX; multiuser system; voice mail; shared access; unattended messaging; *****videoconferencing*****
Class Codes: B6210M (ISDN); B6210P (Teleconferencing); B6220 (Stations and equipment); D4060 (Teleconferencing); D4070 (Telephone systems); D5020 (Networks and inter-computer communications)

25/5/17 (Item 17 from file: 2)
DIALOG(R)File 2:INSPEC

02929616 INSPEC Abstract Number: B87048325
Title: Public *****teleconference***** services: an international review
Author(s): Sebestyen, I.
Author Affiliation: Siemens AG, Munich, West Germany
Journal: Transnational Data and Communications Report vol.10, no.3 p.17-19
Publication Date: March 1987 Country of Publication: USA
CODEN: TDCREP ISSN: 0892-399X
Language: English Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: Responses from 24 countries to a CCITT questionnaire covering *****teleconference***** services worldwide are summarized. As a result of the survey CCITT has started work on standardization of coding for video telephony and video *****teleconference***** . Urgent items for future studies include: *****video***** compression schemes; application of high-speed *****digital***** switching *****networks*****; extension of

*****teleconference***** to public *****data***** network; suitable methods and interfaces in connection with studio and line reservation; and connection between public and private services. (2 Refs)
Descriptors: bandwidth compression; digital communication systems; picture processing; telecommunication services; *****teleconferencing*****
Identifiers: international telecommunication services audio *****teleconference*****; CCITT questionnaire; *****teleconference***** services; standardization; video telephony; video *****teleconference*****; video compression schemes; high-speed digital switching networks; *****teleconference*****; public data network
Class Codes: B6200 (Telecommunication); B6210D (Telephony); B6210P (Teleconferencing); B6430D (CATV and wired systems); B6430J (Applications of television systems)

25/5/18 (Item 18 from file: 2)
DIALOG(R)File 2:INSPEC

02798708 INSPEC Abstract Number: B87007963
Title: Video telephone: gone today, here tomorrow?
Author(s): Kim, K.S.; Li, P.
Author Affiliation: American Satellite Co., Rockville, MD, USA
Journal: Data Communications vol.15, no.12 p.124-8, 131-2, 135-6
Publication Date: Nov. 1986 Country of Publication: USA
CODEN: DACODM ISSN: 0363-6399
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Since the telephone and television were introduced into daily life, people have awaited the integration of these two technologies. Expectations ran high for a technology that could bring live color images of friends and relatives along with their voices into the home. For a long time, transmission and equipment simply cost too much. Advances in technology were unable to bring these costs down to an acceptable level until recently. The latest technologies for compressing video information mean that transmission does not require the enormous amount of bandwidth it once did. To broadcast a television signal in digital form, even with elementary compression (refreshing the screen signal at a rate of 15 frames a second rather than the usual 30), requires about 45 Mbit/s. Full-duplex video at that rate consumes two satellite transponders, a very expensive feat practiced only occasionally by *****network***** television news programs. As a result, most two-way *****video***** *****teleconferencing***** currently used in business applications is conducted with more sophisticated *****digital***** compression techniques, which bring the *****data***** rate down to 1.544 Mbit/s or 768 kbit/s. (0 Refs)
Descriptors: *****teleconferencing*****; videotelephony
Identifiers: analog video *****teleconferencing*****; video information; television signal; elementary compression; 45 Mbit/s; satellite transponders; network television news programs; two-way video *****teleconferencing*****; digital compression techniques; 1.544 Mbit/s; 768 kbit/s
Class Codes: B6210D (Telephony); B6210P (Teleconferencing); B6430J (Applications of television systems)
Numerical Indexing: bit rate 1.544E+06 bit/s; bit rate 7.68E+05 bit/s

25/5/19 (Item 19 from file: 2)
DIALOG(R)File 2:INSPEC

02649605 INSPEC Abstract Number: B86030179, C86022878
Title: Network control centres-the heart of the matter
Author(s): Macleod, B.
Author Affiliation: Infotron Syst., Dorchester, UK
Journal: Communications vol.2, no.12 p.31-2
Publication Date: Dec. 1985 Country of Publication: UK
CODEN: CMMNE7 ISSN: 0266-8009
Language: English Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: Discusses the development of corporate networks. It is likely that these networks will be based upon private leased *****digital***** services providing voice, *****data***** and *****video***** *****conferencing***** integration. *****Network***** management is critical to the successful implementation of these features. Network control centres will be required for configuring, testing, monitoring and maintaining the corporate network. (0 Refs)
Descriptors: telecommunication networks; telecommunications control
Identifiers: voice communication; data communication; network; management ; network control centres; corporate networks; private leased digital services; *****video***** *****conferencing*****
Class Codes: B6210M (ISDN); B6210P (Teleconferencing); C3370 (Communication techniques)

25/5/20 (Item 20 from file: 2)
DIALOG(R)File 2:INSPEC

02615494 INSPEC Abstract Number: B86016732
Title: Defense Commercial Telecommunications Network (DCTN)-a digital integrated services network
Author(s): Adleman, R.
Author Affiliation: AT&T Bell Labs., Holmdel, NJ, USA
Conference Title: IEEE International Conference on Communications 1985 (Cat. No. 85CH2175-8) p.244-6 vol.1
Publisher: IEEE, New York, NY, USA
Publication Date: 1985 Country of Publication: USA 3 vol. xxii+1587 pp.
U.S. Copyright Clearance Center Code: CH2175-8/85/0000-0244$01.00
Conference Sponsor: IEEE
Conference Date: 23-26 June 1985 Conference Location: Chicago, IL, USA
Language: English Document Type: Conference Paper (PA)
Treatment: New Developments (N); Practical (P)
Abstract: The author describes a new, dedicated, nationwide network being built to meet the commercial telecommunications needs of the US Department of Defense. This state-of-the-art, all *****digital***** *****network***** will carry voice, *****data*****, and *****video***** traffic among over 160 different user locations. The design of DCTN is based on a network of 5ESS digital switches and digital access and cross-connect systems (DACS) interconnected by both satellite and terrestrial digital transmission facilities. The integrated set of services to be provided on the DCTN includes switched voice, dedicated voice, dedicated data (at bit rates from 75 b/s to 1.5 Mb/s) and an advanced form of video *****teleconferencing***** that allows for chairperson-controlled multilocation *****teleconferencing***** . DCTN will be the first realization of a major, all digital, integrated services network when it is cut into service in early 1986. (0 Refs)
Descriptors: ISDN; military equipment; *****teleconferencing*****
Identifiers: voice traffic; data traffic; satellite digital transmission

facilities; ISDN; Defense Commercial Telecommunications Network; DCTN; digital integrated services network; US Department of Defense; video traffic; 5ESS digital switches; digital access and cross-connect systems; DACS; terrestrial digital transmission facilities; switched voice; dedicated voice; dedicated data; 75 b/s to 1.5 Mb/s; video *****teleconferencing*****
Class Codes: B6210M (ISDN); B6210P (Teleconferencing); B7930 (Military communications)

25/5/21 (Item 21 from file: 2)
DIALOG(R)File 2:INSPEC

02305655 INSPEC Abstract Number: B84048191, C84039327
Title: Array of offerings brings alternatives to traditional services
Journal: Data Communications p.75-84
Publication Date: mid-May 1984 Country of Publication: USA
CODEN: DACODM ISSN: 0363-6399
Language: English Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: Developments in data communications are briefly reviewed, various new types of services are mentioned. Individual descriptions of new (US) services are then presented, these cover: a private voice/data/ *****video***** *****network*****; a commercial videotex system; a CAD/CAM database used from remote terminals for small manufacturers who cannot afford a full private CAD/CAM system; a nationwide personal-accounts and investment-information database with electronic mail facilities; a value-added *****data***** communications service; *****digital***** FM radio band equipment for paging; a *****video***** *****teleconferencing***** service; a public-*****network***** access service for IBM-3270-compatible equipment on Telenet; asynchronous dial-up transmission on Tymnet; and a new networked DBMS. (0 Refs)
Descriptors: data communication systems
Identifiers: US; private voice/data/*****video***** *****network*****; commercial videotex system; CAD/CAM database; personal-accounts; investment-information; electronic mail; value-added data communications service; digital FM radio band equipment; paging; video *****teleconferencing*****; public-network access service; IBM-3270-compatible equipment; Telenet; asynchronous dial-up transmission; Tymnet; networked DBMS
Class Codes: B6210L (Computer communications); B6210P (Teleconferencing); C5620 (Computer networks and techniques)

25/5/22 (Item 22 from file: 2)
DIALOG(R)File 2:INSPEC

02203890 INSPEC Abstract Number: B84013052, C84013032
Title: Proceedings COMPCON 83 Fall: Delivering Computer Power to End Users. Twenty-Seventh IEEE Computer Society International Conference
Publisher: IEEE Computer Soc. Press, Silver Spring, MD, USA
Publication Date: Oct. 1983 Country of Publication: USA x+548 pp.
ISBN: 0 8186 0492 1
Conference Sponsor: IEEE
Conference Date: 25-29 Sept. 1983 Conference Location: Arlington, VA, USA
Language: English Document Type: Conference Proceedings (CP)
Treatment: Applications (A); Practical (P)

Abstract: The following topics are dealt with: local area networks; distributed processing; satellite *****data***** networks; university computing and communications; *****digital***** PB: voice/*****data*****; micro-operating systems; human-computer interaction; computer vision; *****network***** modeling and performance; computer communications; robotics; *****video***** *****teleconferencing***** ; videotex; microprocessor system and system programming; data *****networks***** and protocols; local data distribution; and logic programming. 73 papers were presented, of which 72 are published in full in the present proceedings, and one as abstract only. Abstracts of individual papers can be found under the relevant classification codes in this or other issues.

Descriptors: computer networks; distributed processing; operating systems (computers); protocols; *****teleconferencing*****; viewdata

Identifiers: *****digital***** voice/*****data*****; operating systems; local area networks; distributed processing; satellite data networks; university computing; human-computer interaction; computer vision; network modeling; computer communications; robotics; video *****teleconferencing*****; videotex; system programming; data networks; protocols; local data distribution; logic programming

Class Codes: B0100 (General electrical engineering topics); B6210K (Viewdata and teletext); B6210L (Computer communications); B6210P (Teleconferencing); C5620 (Computer networks and techniques); C6150J (Operating systems); C7210 (Information services and centres)

25/5/23 (Item 23 from file: 2)
DIALOG(R)File 2:INSPEC

01480272 INSPEC Abstract Number: B80015332
Title: Communication of moving pictures and digital picture encoding
Author(s): Ost, J.; Wendt, H.
Journal: Fernmelde-Praxis vol.56, no.16 p.605-26
Publication Date: 25 Aug. 1979 Country of Publication: West Germany
CODEN: FEPXAP ISSN: 0015-0118
Language: German Document Type: Journal Paper (JP)
Treatment: Practical (P)

Abstract: A survey of the present state of the art, supported by a large number of diagrams and tables and an extensive bibliography in English and German is given. System concepts of videophone and *****video***** conference *****networks***** are explained, followed by a more detailed treatment of standard conversion methods and equipments. A table quotes the technical characteristics and operational data and histories of 9 known systems, beginning with the Berlin-Leipzig public link of 1936. Of main interest is the description of *****digital***** *****data*****- and thus bandwidth-reduction methods, discussing redundancy criteria, conditional replenishment and contour enhancement with the aid of movement detectors and encoders, and the associated addressing and storage procedures. The optimal information transmission mode is differential pulse code modulation, (DPCM) at a 8-bit rate. Another approach to the achievement of minimal redundancy is by the so-called entropy encoding of 4-bit words, based on probability interrogation and prevention of buffer stores' overspills by horizontal and vertical 'sub-scanning' processes. (22 Refs)

Descriptors: encoding; *****teleconferencing*****; television applications; videotelephony

Identifiers: moving pictures; digital picture encoding; videophone; *****video***** conference *****networks*****; DPCM; entropy; *****teleconferencing*****; *****digital***** *****data***** reduction; bandwidth reduction

Class Codes: B6120B (Codes); B6210D (Telephony); B6210P (Teleconferencing

); B6430J (Applications of television systems)

25/5/24 (Item 24 from file: 2)
DIALOG(R)File 2:INSPEC

01302780 INSPEC Abstract Number: B79009394
Title: NTC 78. Conference Record of the IEEE 1978 National Telecommunications Conference
Publisher: IEEE, New York, NY, USA
Publication Date: 1978 Country of Publication: USA ix+1036 pp.
Conference Sponsor: IEEE
Conference Date: 3-6 Dec. 1978 Conference Location: Birmingham, AL, USA
Language: English Document Type: Conference Proceedings (CP)
Treatment: General, Review (G); Theoretical (T)
Abstract: The following topics were dealt with: space telecommunications in the Shuttle era; computer communications; fibre optic systems; *****digital***** *****data***** transmission; integrated *****digital***** *****networks*****; satellite communications; space shuttle *****audio*****-*****video***** developments; digital speech interpolation; digital troposcatter communications systems; digital encoding; error correction coding; microwave devices; *****teleconferencing*****; spread spectrum communications; security; digital radio; inductive interference; and electronic switching.
Descriptors: codes; computer networks; digital communication systems; optical links; satellite links; *****teleconferencing*****
Identifiers: space telecommunications; computer communications; fibre optic systems; *****digital***** *****data***** transmission; satellite communications; space shuttle; digital speech interpolation; digital troposcatter communications; digital encoding; error correction coding; spread spectrum communications; security; digital radio; inductive interference; electronic switching
Class Codes: B6120B (Codes); B6210M (ISDN); B6210P (Teleconferencing); B6230B (Electronic telephone exchanges); B6250G (Satellite relay systems); B6260 (Optical links and equipment)

25/5/25 (Item 25 from file: 2)
DIALOG(R)File 2:INSPEC

01156689 INSPEC Abstract Number: B78011606
Title: Digital television transmission: a cooperative effort
Author(s): Bond, J.; Deczky, A.
Journal: Telesis vol.5, no.2 p.54-8
Publication Date: April 1977 Country of Publication: Canada
CODEN: TLSSAO ISSN: 0040-2710
Language: English Document Type: Journal Paper (JP)
Treatment: Practical (P)
Abstract: Coding equipment designed by Bell-Northern Research uses *****digital***** processing techniques to remove unnecessary video *****data***** , thereby reducing the signal bandwidth and producing more economical transmission. These codecs were installed in June of 1976 in Toronto, Ontario and Montreal, Quebec in an experiment as part of Bell Canada's larger *****video***** *****conferencing***** *****network*****. The trial service has successfully provided digital transmission of black and white video signals since 1976 and modifications will permit full colour operation in 1977. (2 Refs)

Descriptors: decoding; digital communication systems; encoding; television equipment; television networks
Identifiers: codecs; digital television; television conference network
Class Codes: B6420 (Radio and television broadcasting); B6430 (Television equipment, systems and applications)

25/5/26 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03699190 E.I. No: EIP93081055620
Title: Comparing TDMA vs. conventional VSAT
Author: Kamal, Sherin S.
Source: Telecommunications (Americas Edition) v 27 n 3 Mar 1993. p 27-28, 32
Publication Year: 1993
CODEN: TLCMDV ISSN: 0278-4831
Language: English
Document Type: JA; (Journal Article) Treatment: A; (Applications)
Journal Announcement: 9310W5
Abstract: Recent advancements in IC technology (i. e. large scale integration and surface mount technology) have made it possible to manufacture compact time division multiple access (TDMA) very small aperture terminal (VSAT) systems that can provide advanced *****digital***** voice, high-speed *****data*****, and two-way *****video*****-*****conferencing***** services. Applications, *****network***** topology, maintenance, spare costs, security, and public networks are discussed.
Descriptors: Telecommunication equipment; Integrated circuits; LSI circuits; Surface mount technology; Time division multiplexing; Electric *****network***** topology; *****Teleconferencing*****; *****Video signal processing*****
Identifiers: TDMA (time division multiple access); VSAT (very small aperture terminal) systems; Video-*****teleconferencing***** services
Classification Codes:
714.2 (Semiconductor Devices & Integrated Circuits); 703.1 (Electric Networks); 716.4 (Television Systems & Equipment)
716 (Radar, Radio & TV Electronic Equipment); 714 (Electronic Components); 703 (Electric Circuits)
71 (ELECTRONICS & COMMUNICATIONS); 70 (ELECTRICAL ENGINEERING)

25/5/27 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03654521 E.I. No: EIP93050989672
Title: Starworks**T**M - a video applications server
Author: Tobagi, Fouad A.; Pang, Joseph
Corporate Source: Starlight Networks, Inc, Mountain View, CA, USA
Conference Title: 38th Annual IEEE Computer Society International Computer Conference - COMPCON SPRING '93
Conference Location: San Francisco, CA, USA Conference Date: 19930222-19930226
E.I. Conference No.: 18456
Source: 1993 IEEE Compcon Spring 38 Annu IEEE Comput Soc Int Comput Conf COMPCON SPRING 93 1993. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA. p 4-11
Publication Year: 1993

ISBN: 0-7803-1294-5
Language: English
Document Type: CA; (Conference Article) Treatment: A; (Applications)
Journal Announcement: 9308W2
Abstract: There is a growing interest in supporting digital *****video***** applications over local area *****networks*****. These applications fall into two main categories: (i) stored-*****video***** applications which involve the sharing of digital *****video***** information stored in a server through a local area *****network*****, and (ii) live-*****video***** applications which involve use of the *****video***** medium for interactive communication among humans, as seen in *****video***** *****conferencing***** and collaborative computing applications. The characteristics of *****digital***** video files and traffic differ substantially from those encountered with *****data***** applications: (i) video files are quite large (a single video file may be comparable in size to a complete data base); (ii) video traffic is continuous in nature (data traffic is bursty); and finally (iii) the data rate of a video stream is relatively high (larger than the mean data rate of a single data traffic source). Accordingly, conventional file servers are not well suited to support *****video***** services over local area *****networks*****; instead, new servers capable of handling the specific characteristics of *****video***** files and traffic are needed. In this paper, we described StarWorks, a video applications server software designed to support a wide range of digital video applications. (Author abstract)
Descriptors: *****Video***** recording; Local area *****networks*****; Digital signal processing; *****Teleconferencing*****; Computer software; File organization
Identifiers: Digital video; Video servers; Video files; Video applications servers
Classification Codes:
716.4 (Television Systems & Equipment); 722.3 (Data Communication, Equipment & Techniques); 723.5 (Computer Applications)
716 (Radar, Radio & TV Electronic Equipment); 722 (Computer Hardware); 723 (Computer Software)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

25/5/28 (Item 3 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02972266 E.I. Monthly No: EIM9010-043621
Title: Connector and active devices mechanisms for constructing multimedia applications.
Author: Leung, W. H.; Morgan, L. F.; Morgan, M. J.; Wong, B. F.
Corporate Source: AT&T Bell Lab, Naperville, IL, USA
Conference Title: Proceedings of the Second Workshop on Workstation Operating Systems (WWOS-II)
Conference Location: Pacific Grove, CA, USA Conference Date: 19890927
E.I. Conference No.: 13070
Source: Proc Second Workshop Workstation Oper Sys WWOS II. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA. Available from IEEE Service Cent (cat n 89TH0281-6), Piscataway, NJ, USA. p 68-72
Publication Year: 1989
ISBN: 0-8186-2003-X
Language: English
Document Type: PA; (Conference Paper) Treatment: A; (Applications)
Journal Announcement: 9010
Abstract: The authors report on some software mechanisms implemented in

the multimedia workstations of an experimental multimedia *****teleconferencing***** system. These mechanisms are used to interface with the different types of devices involved in multimedia conference applications and to direct information flow among them. They are concerned with *****teleconferencing***** applications with which people in different offices can talk to each other while simultaneously editing the same file, debugging the same program, or working on some other arbitrary applications. Users engaged in *****teleconferencing***** may use multimedia workstations equipped with peripherals such as telephone handsets, image scanners, network interfaces, and mass storage. In the prototype system, the workstations are connected to an experimental fast packet switch capable of switching voice, data, and *****video***** on a single *****network*****. 8 Refs.

Descriptors: COMPUTERS, DIGITAL--******Data***** Communication Systems; *****DIGITAL***** COMMUNICATION SYSTEMS--Voice/Data Integrated Services; *****TELECONFERENCING*****; COMPUTER WORKSTATIONS

Identifiers: MULTIMEDIA WORKSTATIONS

Classification Codes:

722 (Computer Hardware); 718 (Telephone & Line Communications); 723 (Computer Software)

72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

25/5/29 (Item 4 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

02832400 E.I. Monthly No: EI8912135447

Title: Broadband applications and services of public switched networks.

Author: Punj, V.

Corporate Source: AT&T Bell Lab, Naperville, IL, USA

Source: IEEE Transactions on Consumer Electronics v 35 n 2 May 1989 p 106-112

Publication Year: 1989

CODEN: ITCEDA ISSN: 0098-3063

Language: English

Document Type: JA; (Journal Article) Treatment: A; (Applications); G; (General Review)

Journal Announcement: 8912

Abstract: The results of work done at AT&T Bell Lab. on broadband data and *****video***** applications that may be used over a public switched *****network***** like that of a telephone company are summarized. Data and *****video***** applications and *****network***** services associated with these applications are discussed. While data applications are initially seen as being provided to business, video applications are expected to be aimed at residential users. These applictions are presented in separate sections. The author describes example applications for broadband data services that could be offered to business within the next 5 years, namely 1) distributed computing; 2) data distribution; 3) electronic mail; and 4) data retrieval. The following video applications are also described: 1) video telephony; 2) video *****teleconferencing*****; 3) two-way enhanced video service; 4) one way video/image distribution; 5) video/image database retrieval; and 6) video electronic mail.

Descriptors: *TELECOMMUNICATION SYSTEMS; TELEVISION; COMPUTER NETWORKS; SWITCHING SYSTEMS; ELECTRONIC MAIL; DATA TRANSMISSION

Identifiers: *****DATA***** RETRIEVAL; *****DATA***** DISTRIBUTION; DISTRIBUTED COMPUTING; BROADBAND INTEGRATED SERVICES *****DIGITAL***** NETWORK (B-ISDN); PUBLIC SWITCHED NETWORKS

Classification Codes:

716 (Radar, Radio & TV Electronic Equipment); 717 (Electro-Optical

Communications); 718 (Telephone & Line Communications); 722 (Computer Hardware)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

25/5/30 (Item 5 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02707889 E.I. Monthly No: EI8902017298
Title: INVITE64 visual telephone and *****videoconferencing***** system.
Author: Kubo, Tsutomu; Mori, Yoshihiro; Yamaguchi, Hirohisa
Corporate Source: Communication Systems Development Lab, Jpn
Source: Mitsubishi Electric Advance v 44 Sep 1988 p 29-30
Publication Year: 1988
CODEN: MEADD4 ISSN: 0386-5096
Language: English
Document Type: JA; (Journal Article) Treatment: X; (Experimental)
Journal Announcement: 8902
Abstract: A visual telephone and *****video***** *****conferencing***** system for applications in digital communication *****networks***** was developed in Japan. The system uses several bandwidth-compression techniques to transmit color motion and still pictures, voice, and other *****data***** over a single low-speed (56 or 64kpbs) *****digital***** line.
Descriptors: TELEPHONE EQUIPMENT--*Video Telephone; *****TELECONFERENCING*****--Equipment; TELEPHONE--Conference Calls; INFORMATION THEORY--Bandwidth Compression
Identifiers: VISUAL TELEPHONE; *****VIDEOCONFERENCING*****; COLOR MOTION; STILL PICTURES; DIGITAL LINE
Classification Codes:
718 (Telephone & Line Communications); 716 (Radar, Radio & TV Electronic Equipment)
71 (ELECTRONICS & COMMUNICATIONS)

25/5/31 (Item 6 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02589640 E.I. Monthly No: EI8806058732
Title: COMMUNICATING IN THE 1990S.
Author: Solomon, Lisa J.
Source: American City & County v 103 n 3 Mar 1988 p 32, 34, 39-41
Publication Year: 1988
CODEN: ACCOD3 ISSN: 0149-337X
Language: English
Document Type: JA; (Journal Article) Treatment: G; (General Review)
Journal Announcement: 8806
Abstract: Just two years after the break-up of AT&T, the telecommunications industry in 1986 represented a 160-billion-a-year business. As a result of divestiture, giant regional holding companies were formed. Today, these holding companies, along with AT&T, are spending large amounts of money to expand into areas such as paging services, fiber optics and simultaneous transmission of voice and *****data***** called Integrated Services *****Digital***** Networks. With such an explosion of choices in the marketplace, telecommunications management has become one of the fastest-growing industries in the country. These new technologies can give local governments substantial benefits in cost and time savings.
Descriptors: TELECOMMUNICATION; OPTICAL COMMUNICATION EQUIPMENT; FIBER

OPTICS; *****DIGITAL***** COMMUNICATION SYSTEMS; *****DATA*****
TRANSMISSION
  Identifiers: NEW COMMUNICATION TECHNOLOGIES; ADVANCED PRIVATE
COMMUNICATION *****NETWORK*****; *****TELECONFERENCING*****
*****NETWORK*****; VOICE, DATA AND *****VIDEO***** COMMUNICATIONS
  Classification Codes:
  716 (Radar, Radio & TV Electronic Equipment); 717 (Electro-Optical
Communications); 718 (Telephone & Line Communications); 741 (Optics &
Optical Devices)
  71 (ELECTRONICS & COMMUNICATIONS); 74 (OPTICAL TECHNOLOGY)

25/5/32 (Item 7 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02553552 E.I. Monthly No: EIM8803-016193
  Title: DIGITAL INTEGRATED SERVICES NETWORK.
  Author: Habib, I. M.
  Corporate Source: AT&T Bell Lab, Holmdel, NJ, USA
  Conference Title: Proceedings of the National Communications Forum.
  Conference Location: Rosemont, IL, USA Conference Date: 19851007
  Sponsor: Natl Engineering Consortium Inc, Chicago, IL, USA; US Telephone
Assoc
  E.I. Conference No.: 10852
  Source: Proceedings of the National Electronics Conference v 39. Publ by
Professional Education Int Inc p 18-22
  Publication Year: 1985
  CODEN: PNECAC ISSN: 0077-4413
  Language: English
  Document Type: PA; (Conference Paper)
  Journal Announcement: 8803
  Abstract: AT&T is currently building a new, dedicated, nationwide network
to meet the needs of a large government customer. This *****digital*****
network scheduled for service early next year integrates
*****digitized***** voice, *****data***** and *****video***** services on a
single *****network***** structure. The integrated set of services to be
provided on this network include switched voice, dedicated voice, dedicated
data (at bit rates from 75 bps to 1. 5 Mbps) and an advanced form of
*****video***** *****teleconferencing*****. The design of this
*****network***** is based upon an architecture employing advanced digital
switches and digital cross-connect systems, connected by both satellite and
terrestrial digital transmission systems. This network will be one of the
first major all digital, integrated services networks to be cut into
service. (Author abstract)
  Descriptors: DIGITAL COMMUNICATION SYSTEMS--*Voice/Data Integrated
Services; *****TELECONFERENCING*****--Video Recording
  Identifiers: DIGITAL INTEGRATED SERVICES *****NETWORK*****; NATIONWIDE
*****NETWORK*****; GOVERNMENT CUSTOMER; SINGLE *****NETWORK*****;
*****VIDEO***** *****TELECONFERENCING*****; DIGITAL TRANSMISSION
  Classification Codes:
  716 (Radar, Radio & TV Electronic Equipment); 717 (Electro-Optical
Communications); 718 (Telephone & Line Communications)
  71 (ELECTRONICS & COMMUNICATIONS)

25/5/33 (Item 8 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02538520 E.I. Monthly No: EIM8802-009265
Title: *****TELECONFERENCING*****: TODAY'S BUSINESS COMMUNICATIONS.
Author: Rash, Polly
Conference Title: Canadian Satellite User Conference, 1987 - Conference Proceedings.
Conference Location: Ottawa, Ont, Can Conference Date: 19870525
Sponsor: Telesat, Ottawa, Ont, Can
E.I. Conference No.: 10615
Source: Publ by Telesat, Ottawa, Ont, Can p 310-314
Publication Year: 1987
ISBN: 0-9692920-0-7
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8802
Abstract: There are five basic types of *****teleconferencing*****, and each is appropriate for different needs and budgets. Video *****teleconferencing***** for business purposes is growing very rapidly and is used for sales presentations, training, annual meetings, press conferences, and other business purposes. Some organizations have private, dedicated digital networks which link a few key offices; other companies install their own private, full-bandwidth analog networks; and a third group sets up ad hoc networks to serve a specific communications purpose for a short time. All are using business television as a cost-effective, timely means to communicate. (Edited author abstract)
Descriptors: *****TELECONFERENCING*****--*Video Recording; *****DATA***** PROCESSING, BUSINESS; *****DIGITAL***** COMMUNICATION SYSTEMS; TELEVISION SYSTEMS
Identifiers: DEDICATED DIGITAL *****NETWORKS*****; ANALOG *****VIDEO***** *****NETWORKS*****; ANALOG AD HOC *****VIDEO*****
Classification Codes:
716 (Radar, Radio & TV Electronic Equipment); 723 (Computer Software)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

25/5/34 (Item 9 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02231060 E.I. Monthly No: EIM8702-012661
Title: INTELSAT NEW SERVICES.
Author: Hinchman, Walter R.; Perillan, Luis
Corporate Source: INTELSAT, Washington, DC, USA
Conference Title: Collection of Technical Papers - AIAA 11th Communication Satellite Systems Conference.
Conference Location: San Diego, CA, USA Conference Date: 19860317
Sponsor: AIAA, New York, NY, USA; Inst of Electronics & Communications Engineers of Japan, Jpn; Deutsche Gesellschaft fuer Luft- und Raumfahrt eV, Cologne, West Ger; Assoc Aeronautique et Astronautique de France, Paris, Fr ; CASI, Ottawa, Ont, Can
E.I. Conference No.: 08179
Source: AIAA Paper Publ by AIAA, (CP 862), New York, NY, USA p 126-137
Publication Year: 1986
CODEN: AAPRAQ ISSN: 0146-3705
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8702
Abstract: During the past 21 years INTELSAT has developed the world's largest communication satellite *****network*****. In addition to conventional telephone, data, and *****video***** services, INTELSAT now offers INTELSAT Business Services, a service category designed to meet the

special needs of the business community for video *****teleconferencing*****, facsimile, *****data*****, packet switching, *****digital***** voice, electronic mail, and telex. INTELSAT has expanded its domestic services to facilitate the systematic introduction and growth of satellite communications at the national level for both developed and developing countries. (Edited author abstract)
Descriptors: *COMMUNICATION SATELLITES; TELECOMMUNICATION SYSTEMS, SATELLITE RELAY
Identifiers: INTELSAT; COMMUNICATIONS SERVICES; INTELNET; VISTA; TV SERVICES
Classification Codes:
655 (Spacecraft); 716 (Radar, Radio & TV Electronic Equipment)
65 (AEROSPACE ENGINEERING); 71 (ELECTRONICS & COMMUNICATIONS)

25/5/35 (Item 10 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02213491 E.I. Monthly No: EI8706056744
Title: CUSTOMIZED DIGITAL NETWORK FOR THE DEPARTMENT OF DEFENSE.
Author: Spilman, L.
Corporate Source: AT&T Communications
Source: AT&T Technol v 1 n 1 1986 p 58-65
Publication Year: 1986
CODEN: ATTTEJ
Language: ENGLISH
Document Type: JA; (Journal Article) Treatment: A; (Applications)
Journal Announcement: 8706
Abstract: AT&T Communications combines satellite and terrestrial transmission facilities, the digital 5ESS switch, its Digital Access and Cross-Connect System (DACS) and a central control complex to create a dynamic *****digital***** *****network***** for voice, *****data*****, and *****video***** *****teleconferencing*****. Operating at multiples of 1. 544 megabits per second, this new network initially connects 161 locations to 15 service nodes that provide communications services as required. (Author abstract) 5 refs.
Descriptors: *DIGITAL COMMUNICATION SYSTEMS--*Military Communications; TELEVISION EQUIPMENT; TELEPHONE SWITCHING EQUIPMENT
Identifiers: CUSTOMIZED DIGITAL *****NETWORK*****; DEPARTMENT OF DEFENSE; SATELLITE AND TERRESTRIAL TRANSMISSION; DIGITAL 5ESS; *****VIDEO***** *****TELECONFERENCING*****
Classification Codes:
718 (Telephone & Line Communications); 404 (Military Engineering); 716 (Radar, Radio & TV Electronic Equipment); 717 (Electro-Optical Communications); 723 (Computer Software)
71 (ELECTRONICS & COMMUNICATIONS); 40 (CIVIL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

25/5/36 (Item 11 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02157880 E.I. Monthly No: EI8701002742
Title: MULTIMEDIA COMMUNICATION AT THE PRIMARY ISDN ACCESS.
Author: Chiariglione, L.; Fioretto, G.; Gabrielli, L.; Viale, E.
Corporate Source: CSELT, Turin, Italy
Source: CSELT Technical Reports (Centro Studi e Laboratori Telecomunicazioni) v 14 n 4 Aug 1986 p 225-229

Publication Year: 1986
CODEN: CTRPEJ
Language: ENGLISH
Document Type: JA; (Journal Article) Treatment: G; (General Review); X; (Experimental)
Journal Announcement: 8701
Abstract: The primary ISDN access is able to handle Multimedia Communications with a number of elementary channels greater than it is possible at the basic ISDN access, and/or offer a higher service level. Audio- and video-conference, visual telephony, multimedia videotex are examples of multimedia communications. This paper analyses the requirements of multimedia communications, defines flexibles structures to carry and process multimedia signals and examines some possible technical solutions for a multimedia service at the primary ISDN access, taking into account the compatibility with possible multimedia terminals connected to the basic ISDN access. The current status of CCITT Recommendations on ISDN accesses is also considered. (Author abstract) 11 refs.
Descriptors: *****DIGITAL***** COMMUNICATION SYSTEMS; *****TELECONFERENCING*****; *****DATA***** TRANSMISSION--Packet Switching; TELEPHONE EQUIPMENT--Video Telephone
Identifiers: AUDIOCONFERENCING; *****VIDEO***** CONFERENCE; VISUAL TELEPHONE; MULTIMEDIA VIDEOTEX; INTEGRATED SERVICES DIGITAL *****NETWORKS*****
Classification Codes:
716 (Radar, Radio & TV Electronic Equipment); 718 (Telephone & Line Communications)
71 (ELECTRONICS & COMMUNICATIONS)

25/5/37 (Item 12 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02116243 E.I. Monthly No: EIM8609-058986
Title: DESIGN AND DEPLOYMENT OF CONTROL SERVICES BASED ON DIGITAL CROSS-CONNECT SYSTEMS.
Author: Hutcheson, W. Douglas; Snyder, T. M.
Corporate Source: AT&T Bell Lab, USA
Conference Title: GLOBECOM '85: IEEE Global Telecommunications Conference - Conference Record.
Conference Location: New Orleans, LA, USA Conference Date: 19851202
Sponsor: IEEE Communications Soc, New York, NY, USA; IEEE, New Orleans Section, New Orleans, LA, USA
E.I. Conference No.: 08283
Source: Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 85CH2190-7), Piscataway, NJ, USA p 562-566
Publication Year: 1985
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8609
Abstract: The advent of widespread digital transmission technologies deployment at 1. 544 Mb/s and higher rates and the introduction of digital cross-connect systems are key elements in the rapid evolution of new telecommunications services. These digital technologies, being offered to customers in the form of new services, provide the Integrated Services *****Digital***** *****Network***** (ISDN) capabilities of integration of voice, *****data***** and *****video***** services, customer control of channel provisioning; and *****network***** management information for customer-dedicated digital networks. The basic elements of the architecture underlying the ACCUNET family of digital services are outlined. The role of

digital cross-connect systems, their associated support systems, and the services they provide are put into perspective relative to other special private line digital services. An illustrative example of the deployment of customer controlled reconfiguration and the control design criteria for user interfaces are described. 6 refs.
Descriptors: DIGITAL COMMUNICATION SYSTEMS--*Voice/data Integrated Services; *****TELECONFERENCING*****; DATA TRANSMISSION--Packet Switching
Identifiers: BUSINESS COMMUNICATION; DIGITAL CROSS-CONNECT SYSTEMS; ACCUNET SERVICE; CUSTOMER-CONTROLLED RECONFIGURATION; CIRCUIT SWITCHING
Classification Codes:
716 (Radar, Radio & TV Electronic Equipment)
71 (ELECTRONICS & COMMUNICATIONS)

25/5/38 (Item 13 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02116132 E.I. Monthly No: EIM8609-058875
Title: GLOBECOM '85: IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE - CONFERENCE RECORD.
Author: Anon
Conference Title: GLOBECOM '85: IEEE Global Telecommunications Conference - Conference Record.
Conference Location: New Orleans, LA, USA Conference Date: 19851202
Sponsor: IEEE Communications Soc, New York, NY, USA; IEEE, New Orleans Section, New Orleans, LA, USA
E.I. Conference No.: 08283
Source: Publ by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n 85CH2190-7), Piscataway, NJ, USA 3 vol, 1529p
Publication Year: 1985
Language: English
Document Type: CP; (Conference Proceedings)
Journal Announcement: 8609
Abstract: The following topics are dealt with: multi-service integration with optical fibers; software quality and reliability; communication terminals for new services; theory of multiple-access communications systems; advanced onboard processing; packet radio networking; applications for metropolitan area networks; integrated services and network operations; document processing and communication; communication systems modeling methodology; antenna technology and system aspects in satellite communications; experimental integrated local-area voice/*****data***** nets; spread-spectrum communications; services of *****digital***** crossconnect systems; motion video at the DS-0 rate; optical communications; data communications; VLSI for ISDN terminals; operation support for fiber optic systems; quality management; and local area network performance. 304 papers were presented, of which 303 are published in full in the present proceedings, and 1 as an abstract only.
Descriptors: DIGITAL COMMUNICATION SYSTEMS--*Voice/data Integrated Services; OPTICAL COMMUNICATION; COMPUTER NETWORKS--Protocols; RADIO TRANSMISSION--Spread Spectrum; *****TELECONFERENCING*****; TELECOMMUNICATION LINKS, SATELLITE
Identifiers: MULTI-SERVICE INTEGRATION; MULTI-ACCESS COMMUNICATIONS; PACKET RADIO *****NETWORKS*****; MOTION *****VIDEO*****; EIREV
Classification Codes:
716 (Radar, Radio & TV Electronic Equipment); 717 (Electro-Optical Communications); 718 (Telephone & Line Communications); 723 (Computer Software)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

25/5/39 (Item 1 from file: 233)
DIALOG(R)File 233:Microcomputer Abstracts(TM)

0252556 91DC11-002
Videoconferencing -- Not just talking heads
Johnson, Johna Till
Data Communications , November 1, 1991 , v20 n15 p66-70+, 10 Page(s)
ISSN: 0363-6399
Languages: English
Document Type: Feature Articles and News
Geographic Location: United States
Presents an overview of videoconferencing as brought about by the availability of better equipment, lower equipment cost, and cheaper digital signal services. Discusses issues regarding compression, tuning codecs to particular data rates, video quality, sound, and picking the right codec. Includes three sidebars by Johna Till Johnson: ''Freeze Frame on Videoconferencing'' (p72) describes offerings of codec vendors; ''The Big Picture for H.261'' (p80) discusses the H.261 Recommendation that specifies how video bit streams are to be sent across the network; and ''Lights, Camera, Action...Breaking Into Videoconferencing'' (p82) lists things to consider when first trying out videoconferencing. Includes a photo, five graphs, a table, and a diagram. (tbc)
Descriptors: Computer Conferencing; Telecommunications; Trends

25/5/40 (Item 1 from file: 1)
DIALOG(R)File 1:Eric

EJ459388 EA527731
Making and Impact with ISDN.
Riedl, Richard E.; Strom, James L.
Executive Educator; v15 n2 p23-26 Mar 1993
ISSN: 0161-9500
Available from: UMI
Language: English
Document Type: JOURNAL ARTICLE (080); PROJECT DESCRIPTION (141)
Journal Announcement: CIJJUL93
The fledgling ISDN (integrated services digital network) telecommunications technology allowing transmission of data, sound, and video images over standard copper telephone lines is the essential element of Impact North Carolina, a three-year-old interactive distance learning project. Three rural schools are equipped with ISDN phone lines connected to videoconferencing equipment, multimedia work stations, and local area network file-servers. (MLH)
Descriptors: Change Strategies; *Computer Assisted Instruction; *Distance Education; Educational Change; Elementary Secondary Education; Local Area Networks; *Multimedia Instruction; Pilot Projects; Rural Schools; *Telecommunications; *Teleconferencing
Identifiers: *Integrated Services Digital Networks; *North Carolina

25/5/41 (Item 2 from file: 1)
DIALOG(R)File 1:Eric

EJ459387 EA527730
Wired for Learning.

Trotter, Andrew
Executive Educator; v15 n2 p20-23 Mar 1993
ISSN: 0161-9500
Available from: UMI
Language: English
Document Type: JOURNAL ARTICLE (080); EVALUATIVE REPORT (142)
Journal Announcement: CIJJUL93

Telephone cables connecting virtually every U.S. home, school, and work place will soon comprise national integrated services digital network allowing two-way video communication and fast data transfer on mass scale at affordable prices. Families, educators, and at-home workers will have routine access to video conferencing, distance learning, and other home services. Article explains technology and its multimedia instruction potential. (MLH)

Descriptors: *Educational Technology; Elementary Secondary Education; *Interactive Video; *Multimedia Instruction; *Technological Advancement; *Telecommunications; *Teleconferencing

Identifiers: *Integrated Services Digital Networks

25/5/42 (Item 3 from file: 1)
DIALOG(R)File 1:Eric

ED313030 IR014084

A Software Defined Integrated T1 Digital Network for Voice, Data and Video.

Hill, James R.
[1989
9p.; Paper presented at the Annual Meeting of the American Association for Community and Junior Colleges (Washington, DC, March 29-April 1, 1989).
EDRS Price - MF01/PC01 Plus Postage.
Language: English
Document Type: PROJECT DESCRIPTION (141); CONFERENCE PAPER (150)
Geographic Source: U.S.; Texas
Journal Announcement: RIEAPR90

The Dallas County Community College District developed and implemented a strategic plan for communications that utilizes a county-wide integrated network to carry voice, data, and video information to nine locations within the district. The network, which was installed and operational by March 1987, utilizes microwave, fiber optics, digital cross connect and T1 technology to provide the first software-defined educational network to merge all three technologies into one common digital pipeline. The plan included provisions for planning and installation of new digital switches for voice, a packet switched-wide area network for data, and compressed video codes for video teleconferencing and instruction. This report describes: (1) the development of the strategic plan; (2) the technology procurement process; (3) the process of planning for installation; and (4) the installation and implementation events. (Author/GL)

Descriptors: Community Colleges; Cost Effectiveness; *Distance Education; Educational Planning; *Information Networks; Information Technology; Office Automation; Program Descriptions; *Telecommunications; *Teleconferencing; Telecourses; Two Year Colleges

Identifiers: *Dallas County Community College District TX

25/5/43 (Item 1 from file: 202)
DIALOG(R)File 202:Information Science Abs.

00176430 9306430
ISA Document Number in Printed Publication: 9306402
Visiocodec 261: low bit-rate *****videoconferencing*****.
Document Type: Journal Article
Author (Affiliation): Secher, F.; Devimeux, D.; Eudy, G.
Journal: Commutation et Transmission
Publication Language(s): English
Source: Vol. 14 Issue 2 p. 39-48 1992 2
In *****videoconference***** rooms, Visiocodec 261 provides the interface between the audio and video systems and the ISDN or leased line. It complies with the latest international recommendations on *****videoconferencing***** to allow equipment based on different television systems to communicate. The Visiocodec 261 reduces the transmission bit rate and adapts transmission settings to suit the encoder-decoder at the other end of the link.
Descriptors: *****AUDIO***** COMMUNICATION; *****DATA***** TRANSMISSION; *****DIGITAL***** SYSTEMS; INTERFACING; ISDN (INTEGRATED SERVICES *****DIGITAL***** *****NETWORKS*****); NETWORKS; TELEVISION; *****VIDEOCONFERENCING*****
Subject Class Header (Number):Information Generation and Promulgation, Meetings, Personal Interchange (03.04)

25/5/44 (Item 2 from file: 202)
DIALOG(R)File 202:Information Science Abs.

00154784 9104784
ISA Document Number in Printed Publication: 9105123
Audioconference terminals for the switched telephone network.
Document Type: Journal Article
Author (Affiliation): Botto, J.-L.
Journal: Commutation et Transmission
Publication Language(s): English
Source: Issue 4 p. 57-64 1990
This paper describes a digital audiomeeting terminal developed by TRT that connects directly to the ISDN network and which allows audioconference link-ups between two sites with better listening comfort. Full-duplex transmission of *****digital***** *****data***** and audio signals using acoustic echo cancellation techniques which offers enhanced audioconferencing is also described. A simplified audiomeeting terminal for analogue access to the switched telephone network is also described.
Descriptors: *****AUDIO***** COMMUNICATION; CONFERENCES; ISDN (INTEGRATED SERVICES DIGITAL *****NETWORKS*****); *****NETWORKS*****; TELECOMMUNICATIONS; *****TELECONFERENCES*****; TELEPHONE; TERMINALS
Subject Class Header (Number):Information Processing and Control, Graphics and Displays (05.08)

25/5/45 (Item 3 from file: 202)
DIALOG(R)File 202:Information Science Abs.

00118382 8708382
ISA Document Number in Printed Publication: 8707868
Digital multipoint *****teleconferencing***** for special service circuits.
Document Type: Monographic Chapter
Author (Affiliation): Baranyai, L. (Bell Telephone Labs.)

Country of Affiliation: United States
Publication Language(s): English
Publication Country: United States
Source: In Proceedings, GLOBECOM '83: IEEE Global Telecommunications Conference San Diego, CA, November 28-December 1, 1983 p. 548-553 1983 IEEE New York, NY 7

This paper describes a VLSI-based multipoint *****teleconferencing***** system for special service *****networks***** that supports both private line *****audio***** *****teleconferencing***** and multipoint arrangement voiceband *****data***** circuits. Design considerations, system architecture, and *****digital***** signal processing techniques are discussed.

Descriptors: CIRCUITS; DIGITAL EQUIPMENT; TELECOMMUNICATIONS; *****TELECONFERENCES*****
Subject Class Header (Number):Information Generation and Promulgation, Meetings, Personal Interchange (03.04)

25/5/46 (Item 4 from file: 202)
DIALOG(R)File 202:Information Science Abs.

00116408 8706408
ISA Document Number in Printed Publication: 8705932
Multimedia communication at the basic ISDN access.
Document Type: Monographic Chapter
Author (Affiliation): Chiariglione, L. (Centro Studie Laboratori Telecomunicationi, Torino); Gabrielli, L.; Viale, E.
Country of Affiliation: Italy
Publication Language(s): English
Publication Country: United States
Source: In Proceedings, GLOBECOM '85: IEEE Global Telecommunications Conference New Orleans, LA, December 2-5, 1985 p. 363-367 1985 IEEE New York, NY 9

Multimedia communication, such as audio- and *****videoconference*****, visual telephony, multimedia videotex etc., require the definition of a flexible structure to carry and process multimedia signals. The paper examines some possible technical solutions evaluating the impact on the terminal and the ISDN, taking into account the service as perceived by the user.

Descriptors: INTEGRATED SERVICES *****DIGITAL***** NETWORKS (ISDN); ISDN (INTEGRATED SERVICES DIGITAL *****NETWORKS*****); COMMUNICATIONS; *****DATA***** TRANSMISSION; MEDIA; TELECOMMUNICATIONS; *****TELECONFERENCES*****; *****VIDEO*****
Subject Class Header (Number):Information Generation and Promulgation, Communications and Telecommunications Systems (03.11)

25/5/47 (Item 5 from file: 202)
DIALOG(R)File 202:Information Science Abs.

00046268 7900268
CONTINUED IMPLEMENTATION AND TESTING OF A NEIGHBORHOOD OFFICE CENTER (OC) AND INTEGRATION OF THE NOC WITH AN ADMINISTRATIVE CORRESPONDENCE MANAGEMENT INFORMATION SYSTEM.
Document Type: Report
Author (Affiliation): ROSE AND COMPANY.
Publication Language(s): English
Source: FINAL REPORT. NASA-CR-156150. CONTRACT NASW-3057. 1978 MARCH 16.

ROSS AND COMPANY, BOSTON, MASSACHUSETTS. 85 P. NTIS: N78-21970/6GA; HC (A05), MF (A01).

THE CONCEPT OF DECENTRALIZED (REMOTE) NEIGHBORHOOD OFFICES, LINKED TOGETHER THROUGH A SELF-SUSTAINING COMMUNICATIONS *****NETWORK***** FOR EXCHANGING VOICE MESSAGES, *****VIDEO***** IMAGES, AND *****DIGITAL***** *****DATA***** WAS QUANTITATIVELY EVALUATED. HARDWARE AND PROCEDURES FOR THE INTEGRATED MULTIFUNCTIONAL SYSTEM WERE DEVELOPED. THE CONFIGURATION OF THE NEIGHBORHOOD OFFICE CENTER (NOC) IS EXPLAINED, ITS PRODUCTION STATISTICS GIVEN, AND AN EXPERIMENT FOR NOC NETWORK INTEGRATION VIA SATELLITE IS DESCRIBED. THE HARDWARE SELECTED FOR THE INTEGRATION NOC/MANAGEMENT INFORMATION SYSTEM IS DISCUSSED, AND THE NASA *****TELECONFERENCING***** NETWORK IS EVALUATED.

(Abstract Source: STAR)
Descriptors: NEIGHBORHOOD OFFICE CENTER
Subject Class Header (Number):Information Systems and Applications, Management Information Systems and Decision Support (06.09)

25/5/48 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abstracts Online1861-1996/Oct

01244810 ORDER NO: AAD92-32568
ERROR MODELING, SELF-CALIBRATION AND DESIGN OF PIPELINED ANALOG TO DIGITAL CONVERTERS. (VOLUMES I AND II)

Author: SOENEN, ERIC GEORGES
Degree: PH.D.
Year: 1992
Corporate Source/Institution: TEXAS A&M UNIVERSITY (0803)
Co-chairs: RANDALL L. GEIGER; EDGAR SANCHEZ-SINENCIO
Source: VOLUME 53/06-B OF DISSERTATION ABSTRACTS INTERNATIONAL. PAGE 3079. 479 PAGES
Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL
Descriptor Codes: 0544

As the field of signal processing accelerates toward the use of high performance digital techniques, there is a growing need for increasingly fast and accurate analog to digital converters.

Three highly visible examples of this trend originated in the last decade. The advent of the compact disc revolutionized the way high-fidelity audio is stored, reproduced, recorded and processed. Digital communication links, fiber optic cables and in the near future ISDN networks (Integrated Services Digital *****Network*****) are steadily replacing major portions of telephone systems. Finally, *****video*****-*****conferencing*****, multi-media computing and currently emerging high definition television (HDTV) systems rely more and more on real-time *****digital***** *****data***** compression and image enhancing techniques.

All these applications rely on analog to digital conversion. In the field of digital audio, the required conversion accuracy is high, but the conversion speed limited (16 bits, 2 x 20 kHz signal bandwidth). In the field of image processing, the required accuracy is less, but the data conversion speed high (8-10 bits, 5-20MHz bandwidth). New applications keep pushing for increasing conversion rates and simultaneously higher accuracies. This dissertation discusses new analog to digital converter architectures that could accomplish this.

As a consequence of the trend towards digital processing, prominent analog designers throughout the world have engaged in very active research on the topic of data conversion. Unfortunately, literature has not always kept up. At the time of this writing, it seemed rather difficult to find detailed fundamental publications about analog to digital converter design.

This dissertation represents a modest attempt to remedy this situation. It is hoped that anyone with a back-ground in analog design could go through this work and pick up the fundamentals of converter operation, as well as a number of more advanced design techniques.

25/5/49 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS

1426146 NTIS Accession Number: NTN89-1011
Secure Indications and Warning Video Communications Systems (NTIS Tech Note)
Department of Energy, Washington, DC.
Corp. Source Codes: 052661000
Dec 89 1p
Languages: English
Journal Announcement: GRAI9003
FOR ADDITIONAL INFORMATION: Contact: Jack G. Peterson, Idaho National Engineering Laboratory, PO Box 1625, Idaho Falls, ID 83415; (208) 526-2893. Refer to DOE/INEL-048/TN.
NTIS Prices: Not Available NTIS
Country of Publication: United States
This citation summarizes a one-page announcement of technology available for utilization. The Secure Indications and Warning Video Communications System (SVCS) is a prototype, multimedia, secure communications system. It provides real-time full-motion video, freeze-frame video, full-duplex audio, graphics and digital-data communications to a selected number of intelligence indications and warnings (I&W) centers within the Department of Defense. The prototype development includes design, integration and installation of local command networks that when linked together into a wide area network form a communications system that will enable remote interactive analysis and management of I&W situations and crises. The SVCS integrates commercial off-the-shelf video and audio technology incorporating digital communications compression techniques, cryptographic devices, and highly user-friendly computer control. Each command network has been configured for the unique requirements of video, audio, data communications, image and display that fit into the normal working environment and operational process of their I&W center. The open architecture of the SVCS provides a framework for the current flexibility and any future enhancements. The basic concepts incorporated in the architecture are compatibility with existing government video teleconferencing systems, tailoring to fit the continually changing working environment of the I&W centers, operational simplicity to eliminate special training and maintenance requirements, and expandability to allow for future technology advancements. Teleconferencing is only one function of SVCS; in addition, the system also provides for internal/external briefings, demos, newscasts, etc. Unlike most commercial systems designed to fixed room configurations, SVCS will fit into existing I&W environments. The entire system is also designed to be operated within a security controlled facility with the intelligence analyst providing full operation of the system. Applications include military installations; industrial power plants; monitoring activities at remote sites; basic communication between sites; maintenance operations.
Descriptors: *Video signals; *Secure communication; *Military communication; *Warning systems
Identifiers: NTISNTND
Section Headings: 74G (Military Sciences--Military Operations, Strategy, and Tactics); 45C (Communication--Common Carrier and Satellite)

25/5/50 (Item 2 from file: 6)
DIALOG(R)File 6:NTIS

650286 NTIS Accession Number: N78-21970/6
Continued Implementation and Testing of a Neighborhood Office Center (NOC) and Integration of the NOC with an Administrative Correspondence Management Information System
(Final Report)
Ross (S.) and Co., Boston, Mass.
Report No.: NASA-CR-156150
16 Mar 78 85p
Journal Announcement: GRAI7816; STAR1612
NTIS Prices: PC A05/MF A01
Contract No.: NASW-3057
The concept of decentralized (remote) neighborhood offices, linked together through a self-sustaining communications network for exchanging voice messages, video images, and digital data was quantitatively evaluated. Hardware and procedures for the integrated multifunctional system were developed. The configuration of the neighborhood office center (NOC) is explained, its production statistics given, and an experiment for NOC network integration via satellite is described. The hardware selected for the integration NOC/management information system is discussed, and the NASA teleconferencing network is evaluated.
Descriptors: *Data management; *Management information systems; *NASA programs; *Network synthesis; *Remote consoles; Data bases; Data processing terminals; Space shuttles; Telecommunication; Teleconferencing
Identifiers: NTISNASA
Section Headings: 5A (Behavioral and Social Sciences--Administration and Management); 5B (Behavioral and Social Sciences--Documentation and Information Technology); 17B (Navigation, Communications Detection, and Countermeasures--Communications); 88B (Library and Information Sciences--Information Systems); 70C (Administration and Management--Management Information Systems); 45C (Communication--Common Carrier and Satellite)

25/5/51 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00699702 JICST ACCESSION NUMBER: 88A0439030 FILE SEGMENT: JICST-E
Development of a multi-media multiplexer.
KATSUKAWA TAMOTSU (1); NISHIHARA TSUTOMU (1); KANDA ICHIRO (1); NAKAMURA NOBUYUKI (2); NISHIO MASAHIRO (2); ONO HIROHARU (2); SASAMOTO TOORU (2); ITO KENJI (3)
(1) Sumitomodenkikogyo Johodenshiken; (2) Sumitomo Electric Industries, Ltd.; (3) Sumitomodenkohaitekkusu
Sumitomo Denki(Sumitomo Electric Technical Review), 1988, NO.132, PAGE.65-73, FIG.12, TBL.2
JOURNAL NUMBER: F0314AAL CODEN: SUDEA
UNIVERSAL DECIMAL CLASSIFICATION: 621.394/.396 621.394/.395
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
ABSTRACT: Recent developments in OA, CAD/CAM, and FA have increased information traffic within a company. In order to accommodate this increasing traffic, new data communication networks are being constructed which are expected to allow high-speed, high-quality, economical transmission of varied types of information for such systems

as telephones, facsimiles, computers, *****data***** terminals, and *****video***** *****conferencing*****. NTT is building a high-speed *****digital***** *****network***** as the trunk carrier for *****data***** networks. The multi-media multiplexer, which is intended for connection to this *****digital***** network, multiplexes varied types of media *****data***** and transmits it over the network. Sumitomo has developed the SUMINET-7100 and SUMINET-7200, multi-media multiplexers which feature high efficiency, RAS capabilities, and flexible network compatibility. These systems have a telephone line toll switching capability and can connect to LAN and other types of networks.(author abst.)

DESCRIPTORS: multiplexer; signal multiplex; integrated communication network; digital communication; LAN; link connecting; communication monitoring; exchange system

BROADER DESCRIPTORS: signal transmission equipment; communication apparatus ; equipment; signal processing; treatment; multiplex; modification; communication network; information network; network; communication system; method; computer network; link operating; communication operation; operation(processing); connection; monitoring; communication administration; management

CLASSIFICATION CODE(S): ND07040L; ND11010T

File 275:IAC(SM) Computer Database(TM) 1983-1996/Oct 28
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File 623:Business Week 1985-1996/Oct W3
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File 771:Textline Global News 1980-1989
(c) 1994 Reuters Info.Svcs.
File 262:Canadian Bus. & Current Affairs 1982-1996/Sep
(c) 1996 Micromedia Ltd.
File 621:IAC New Prod.Annou.(R) 1985-1996/Oct 28
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Set	Items	Description
S1	102446	(TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-IDEOTELECONFERENC?
S2	40958	S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-25)
S3	28	S2(100N)(VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHAN-

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            G?)
S4          99   S2(100N)((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(P-
            AL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTE-
            M))
S5        1930   S2(100N)(SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? -
            OR CHANNEL?)
S6         464   S2(100N)((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?))(100N)
              (NETWORK?(N10)(AUDIO OR VIDEO)))
S7           0   S3(100N)S4(100N)S6(100N) S7
S8           0   S3(100N)S4(100N)S6
S9           0   S3(N100)S4(N100)S5(N100)S6
S10          0   S3(N100)S4(N100)S5
S11          0   S3(N100)S4(N100)S6
S12          0   S3(N100)S5(N100)S6
S13          0   S4(N100)S5(N100)S6
S14          4   S3(N100)(S4 OR S5 OR S6)
S15          9   (S4(N100)(S5 OR S6)) NOT S14
S16         47   (S5(N100)S6) NOT (S14 OR S15)
S17          2   RD S14 (unique items)
>>>KWIC option is not available in file(s): 621

 17/3,KWIC/1     (Item 1 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)
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01178262     SUPPLIER NUMBER: 04516948     (USE FORMAT 7 OR 9 FOR FULL TEXT)
Firm offers desktop video-conference system. (product announcement)
Kanzler, Stephen
PC Week, v3, n45, p32(1)
Nov 11, 1986
DOCUMENT TYPE: product announcement      ISSN: 0740-1604      LANGUAGE:
  ENGLISH      RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT:   745    LINE COUNT:  00059

     Compression Labs Inc. (CLI), the industry leader in *****video*****
-conferencing equipment, last week introduced the Rembrandt Desktop Video
System, the first step in bringing...

...at the push of a button.
      The Rembrandt Desktop Video System can provide local video-
*****conferencing***** capability to any PC hooked to a broadband local
area network such as the IBM PC Network or the Sytek System 6000 local area
*****network*****. In addition, with CLI's Rembrandt Codec, the
*****video*****-*****conferencing***** capability can be extended to a PC
located anywhere in the world that can be...
...link. (Codec is a coder /decoder device that translates the analog video
signal into compressed *****digital***** *****data***** so that it can be
transmitted using *****digital***** transmission techniques.)
      The Rembrandt Video Station, the desktop portion of the system,
includes a color...

...at $6,600, which does not include the PC or the necessary color-graphics
and *****network***** adapter cards.
      *****Video***** communications over a local area *****network*****
also requires that the standard Sytek or IBM network translator (the part
of a broadband...

...controller, priced at $6,500, supports as many as 64 PCs in a local area
*****network***** and can support 22 simultaneous *****video*****
conferences. Because it is on a broadband *****network*****, each
```

communication session has its own separate frequency. Moreover, there is no degradation of the network's ability to transmit standard *****digital***** *****data***** with the activation of additional video conferences.
Remote communications require the addition of the CLI...

17/3,KWIC/2 (Item 1 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

02076514
PICTURETEL BEGINS CUSTOMER SHIPMENTS OF NEW C-3000 VIDEO CODEC

News Release August 22, 1988 p. 1

... NASDAQ:PCTL), announced today that it has begun customer shipments of its new C-3000 *****videoconferencing***** codecs according to schedule. The company delivered its first two units to Datapoint Corporation in...

...Manufacturer to Datapoint, where the codec becomes an integrated portion of Datapoint's MINX (TM) *****video*****/*****voice*****/*****data***** communications *****network*****. The MINX system is a switched *****network***** which allows *****multiple***** desktop video workstations and larger conference room systems to interact on a single *****network***** where they can share the power of the C- 3000 codec when they need it...

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         (c) 1996 St. Petersburg Times
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         (c) 1996 McGraw-Hill Companies Inc
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File 239:MathSci(R) 1940-1996/Nov
         (c) 1996 American Mathematical Society
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Set      Items   Description
S1      102446   (TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR
              TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-
              IDEOTELECONFERENC?
S2       40958   S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-
              25)
S3          28   S2(100N)(VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHAN-
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            G?)
S4          99   S2(100N)((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(P-
              AL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTE-
              M))
S5        1930   S2(100N)(SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? -
              OR CHANNEL?)
S6         464   S2(100N)((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?))(100N)
                (NETWORK?(N10)(AUDIO OR VIDEO)))
S7           0   S3(100N)S4(100N)S6(100N) S7
S8           0   S3(100N)S4(100N)S6
S9           0   S3(N100)S4(N100)S5(N100)S6
S10          0   S3(N100)S4(N100)S5
S11          0   S3(N100)S4(N100)S6
S12          0   S3(N100)S5(N100)S6
S13          0   S4(N100)S5(N100)S6
S14          4   S3(N100)(S4 OR S5 OR S6)
S15          9   (S4(N100)(S5 OR S6)) NOT S14
S16         47   (S5(N100)S6) NOT (S14 OR S15)
S17          2   RD S14 (unique items)
S18          7   RD S15 (unique items)
>>>KWIC option is not available in file(s): 621

 18/3,KWIC/1     (Item 1 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)
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01538907     SUPPLIER NUMBER: 12728571    (USE FORMAT 7 OR 9 FOR FULL TEXT)
Real-time delivery could revolutionize networking.
Raymond, Mark
Digital News & Review, v9, n18, p8(3)
Sept 28, 1992
ISSN: 1065-7452      LANGUAGE: ENGLISH      RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT:   3399    LINE COUNT:  00267

...     the Joint Photographer Experts Group (JPEG) of the International
Standards Organization, it is possible to *****transmit***** a digital
signal of *****NTSC***** size and quality in 9.4Mbits per second (Mbps).
      More advanced compression techniques, like the...

...the MPEG, will bring this speed down to 1.5Mbps. A two-way JPEG-based
*****teleconference***** requires 18.8Mbps.
      A third compression standard from the CCITT, called Px64, seeks to
compress...

...of bandwidth (see DR, May 18, page 34).
      It is possible to set up a *****teleconferencing***** application
today without using compression, but those who attempt to do so will
encounter several trade-offs. For example, the DECspin
*****teleconferencing***** package moves uncompressed *****digital*****
*****video***** across a 100Mbps Fiber Distributed *****Data***** Interface
(FDDI) *****network*****. To accomplish this transmission, DECspin reduces
the number of frames per second that are required...


 18/3,KWIC/2     (Item 2 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)
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01370162     SUPPLIER NUMBER: 08798572    (USE FORMAT 7 OR 9 FOR FULL TEXT)
Light up your dark fiber roots: providing customer-defined broadband
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transmission services using the dark fibers in installed digital trunk plant is a smart way for public network operators to fatten their bottom lines. (includes related article about companies that can provide transmission capabilities that could provide profits for public carriers)
Paulson, Bob
Telephony, v219, n8, p30(3)
August 13, 1990
ISSN: 0040-2656 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2417 LINE COUNT: 00197

... geometric placement-have been treated by system developers as independent variables.

Two-way ancillary data *****channels***** between picture-creating sources and workstations are customary. When these visual communications bundles are transported on public *****networks*****, demand will immediately materialize for ancillary voice *****channels***** to connect all points.

The untapped visual communications services market's transmission needs are at once the same-a primary video signal accompanied by *****multiple***** *****channels***** of sound and digital data-yet different because of a confusing profusion of formats. TV Needs vs. Offerings *****Transmission***** of 4.2-MHz bandwidth *****NTSC***** television signals at nominal 45-Mb/s DS3 throughout rates translates into a bandwidth compression of 3-to-1. Business education, medical and government customers using NTSC for *****videoconferencing***** generally opt for even slower services-1.544Mb/s DS1, sub-T1 services at 384...

18/3,KWIC/3 (Item 1 from file: 148)
DIALOG(R)File 148:IAC Trade & Industry Database
(c) 1996 Info Access Co. All rts. reserv.

05226615 SUPPLIER NUMBER: 10924609 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Will HDTV be the ISDN of the 1990s? (high-definition television; integrated services digital networks)
Goeller, Lee
Business Communications Review, v21, n6, p61(5)
June, 1991
ISSN: 0162-3885 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 4812 LINE COUNT: 00359

... air signal would not have to be compromised by compression into 6 MHz, and existing *****channels*****, presently carrying NTSC signals, would not be threatened. There ought to be something in the problem that existed when only terrestrial *****broadcasting***** was available, but which is nearly irrelevant in today's world of *****multiple***** delivery systems.

Existing *****NTSC***** TV sets, VCRs, camcorders, etc., are not going to go away; indeed, use of these devices will increase as new *****transmission***** capabilities, designed just for them, give them new jobs. Video *****teleconferencing*****, for instance, is only now coming into use because the NTSC TV signal can be compressed into two digital voice *****channels*****. DBS, packing eight TV *****channels***** into a single satellite transponder, is another example. In both instances, digital compression techniques of...

18/3,KWIC/4 (Item 1 from file: 636)
DIALOG(R)File 636:IAC Newsletter DB(TM)
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00957210
UNTITLED ARTICLE
SATELLITE WEEK November 26, 1990 V. 12 NO. 47
ISSN: 0193-2861 WORD COUNT: 123
PUBLISHER: Warren Publishing, Inc.

... demonstrated time-multiplexed TV, video compression technique that digitizes, compresses and combines up to 3 *****separate***** *****NTSC***** -format TV source signals and stereo audio pairs into single TV signal that then can be *****transmitted***** in 36-MHz satellite transponder. Technique permits threefold increase in throughput with existing satellite equipment, Comsat said. Likely users of system include earth station operators, *****network***** and cable TV organizations, entities that use international *****teleconferencing***** . In demonstrations, live TV programming was sent from London to British Telecommunications earth station, Goonhilly...

18/3,KWIC/5 (Item 1 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

03063429
MULTIMEDIA MOVES TO THE MASSES

Electronic Engineering Times March 28, 1991 p. 8
ISSN: 0192-1541
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 1332

...special divisions to investigate multimedia issues.
For instance, AT&T is developing its own video-*****teleconferencing***** system at its Bell Laboratories facility in Holmdel, N.J. "Rapport" is AT&T's...

... workstations. A 10-Mbit Ethernet is used to transmit data among the workstations, with a *****separate***** *****network***** used to transmit voice. The system's software environment is based on Unix and the...

...which is not designed for widespread use. The company is also attempting to add new *****network***** capabilities to tackle the problem of long-distance conferencing.
The present Rapport system does not...
...incorporate it into future implementations.
The large display
In addition to their work in video *****teleconferencing*****, a number of companies are developing technology for HDTV. Among the smaller companies involved in HDTV are *****Broadcast***** Systems Design Inc. (Santa Clara, Calif.), which has developed a high-index color-encoding system that is compatible with *****NTSC*****, *****PAL*****, and future HDTV formats. According to the company, the new system uses significantly higher frequencies...

18/3,KWIC/6 (Item 2 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

02853285
Comsat's Intelsat Satellite Services business unit

Satellite Week November 26, 1990 p. N/A
ISSN: 0193-2861
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 124

... demonstrated time-multiplexed TV, video compression technique that digitizes, compresses and combines up to 3 *****separate***** *****NTSC***** -format TV source signals and stereo audio pairs into single TV signal that then can be *****transmitted***** in 36-MHz satellite transponder. Technique permits threefold increase in throughput with existing satellite equipment, Comsat said. Likely users of system include earth station operators, *****network***** and cable TV organizations, entities that use international *****teleconferencing***** . In demonstrations, live TV programming was sent from London to British Telecommunications earth station, Goonhilly....

18/3,KWIC/7 (Item 3 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

02847109
Intelsat Satellite Services demonstrates TV technique

Communications Daily November 23, 1990 p. N/A
ISSN: 0277-0679
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 123

... demonstrated time-multiplexed TV video compression technique that digitizes, compresses and combines up to 3 *****separate***** *****NTSC***** -format TV source signals and stereo audio pairs into single TV signal that then can be *****transmitted***** in 36-MHz satellite transponder. Technique permits threefold increase in throughput with existing satellite equipment, Comsat said. Likely users of system include earth station operators, *****network***** and cable TV organizations, entities that use international *****teleconferencing***** . In demonstrations, live TV programming was sent from London to British Telecommunications earth station, Goonhilly...

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File 735:St. Petersburg Times 1989- 1996/Oct 25
         (c) 1996 St. Petersburg Times
File 624:McGraw-Hill Pubs 1985-1996/Oct 25
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File 239:MathSci(R) 1940-1996/Nov
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         (c) 1996 Reuters Info.Svcs.
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         (c) 1996 Reuters Info.Svcs.
File 771:Textline Global News 1980-1989
         (c) 1994 Reuters Info.Svcs.
File 262:Canadian Bus. & Current Affairs 1982-1996/Sep
         (c) 1996 Micromedia Ltd.
File 621:IAC New Prod.Annou.(R) 1985-1996/Oct 28
         (c) 1996 Information Access Co

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S1      102446   (TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR
              TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-
              IDEOTELECONFERENC?
S2       40958   S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-
              25)
S3          28   S2(100N)(VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHAN-
```

G?)
S4 99 S2(100N)((TRANSMIT?. OR TRANSMISSION? OR BROADCAST?)(20N)(P-
AL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTE-
M))
S5 1930 S2(100N)(SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? -
OR CHANNEL?)
S6 464 S2(100N)((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?))(100N)
(NETWORK?(N10)(AUDIO OR VIDEO)))
S7 0 S3(100N)S4(100N)S6(100N) S7
S8 0 S3(100N)S4(100N)S6
S9 0 S3(N100)S4(N100)S5(N100)S6
S10 0 S3(N100)S4(N100)S5
S11 0 S3(N100)S4(N100)S6
S12 0 S3(N100)S5(N100)S6
S13 0 S4(N100)S5(N100)S6
S14 4 S3(N100)(S4 OR S5 OR S6)
S15 9 (S4(N100)(S5 OR S6)) NOT S14
S16 47 (S5(N100)S6) NOT (S14 OR S15)
S17 2 RD S14 (unique items)
S18 7 RD S15 (unique items)
S19 33 RD S16 (unique items)
>>>KWIC option is not available in file(s): 621

19/3,KWIC/1 (Item 1 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)

01601916 SUPPLIER NUMBER: 13951299 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Hub manages digital video; Teleos' VideoHub sends multimedia over LANs,
WANs. (local area networks, wide area networks) (Teleos Communications
Inc.'s VideoHub Model 20) (Product Announcement)
Loudermilk, Stephen
PC Week, v10, n23, p47(2)
June 14, 1993
DOCUMENT TYPE: Product Announcement ISSN: 0740-1604 LANGUAGE:
ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 376 LINE COUNT: 00030

... is aimed at streamlining network management, according to company officials and Teleos customers.

"With the *****network***** management of Teleos, you see immediately where the problem is," said Mark Blaesi, director of...

...New York.

The Model 20 incorporates many of the same features as Teleos' other Intelligent *****Network***** Access Products but is easier to use for sending voice, *****data*****, image and *****video***** from LAN to WAN *****networks***** using switched *****digital***** lines, said Reggie Best, vice president of marketing for Teleos in Eatontown, N.J.

The...

...the VideoHub Model 20 is its Dynamic Access Switching architecture, which allows users to share *****multiple***** applications across a variety of switched digital phone services, Best said. The architecture eliminates the...

...one digital phone service.

For example, with the VideoHub Model 20, users could access a *****videoconferencing***** application via several switched digital phone services.

Initially, Teleos will aim the VideoHub Model 20...

...years, Teleos will migrate the hub to desktop PC platforms with ISDN (Integrated Services Digital *****Network*****) Primary Rate and Ethernet interfaces, company officials said.
Integrating support for PCs will be increasingly...

19/3,KWIC/2 (Item 2 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)

01593430 SUPPLIER NUMBER: 13619424 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Comparing TDMA vs. continental VSAT (time division multiple access; very small aperture terminals)
Kamal, Sherin S.
Telecommunications, v27, n3, p27(3)
March, 1993
ISSN: 0278-4831 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2296 LINE COUNT: 00195

... needs have grown though, increased demand for digital voice, high-speed data, and two-way *****videoconferencing***** has stretched traditional single *****channel***** per carrier/*****multiple***** *****channel***** per carrier (SCPC/MCPC) and demand assigned-frequency division *****multiple***** access (DA-FDMA) VSAT technologies to their respective limits. Efforts have resulted in some improvements...

...scale integration and surface mount technology), have made it possible to manufacture compact time division *****multiple***** access (TDMA) VSAT systems that can provide advanced *****digital***** voice, high-speed *****data*****, and two-way *****videoconferencing***** services.
TDMA HISTORY
Understandably, when most of us think of TDMA, we visualize very large...

...such as those used by Intelsat, which are used for trunking hundreds or thousands of *****channels*****. Many believe that TDMA is not a cost-effective method for low-volume voice, data, or *****video***** applications, or for *****networks***** requiring full demand assigned *****multiple***** access (DAMA) interconnectivity. Indeed, in the past, TDMA-based systems were very large and, as...

...full range of voice, data, and video capabilities and are very cost-effective for large *****networks*****. These systems also provide full DAMA and/or pre-assigned operation and can be configured in either star, mesh, broadcast, or combination *****networks*****.
WHY TDMA?
Myths still persist and continue to be perpetuated about TDMA VSAT performance and...

19/3,KWIC/3 (Item 3 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)

01583008 SUPPLIER NUMBER: 13408984 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Fractional T1: Taiwan's Public Telephone Telegraph selects Digicom Systems to provide fractional T1 DSU/CSU. (Digicom Systems Inc.'s 5664N FT1 Data Service Unit/ Channel Service Units)

EDGE, on & about AT&T, v8, n236, p21(1)
Feb 1, 1993
LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 338 LINE COUNT: 00029

... We are pleased our technology was selected to support Taiwan's growth in high-speed *****digital***** *****data***** *****network***** communications."

By combining the functions of a *****Data***** Service Unit and *****Channel***** Service Unit into one system, the 5664N FT1 DSU/CSU provides all the advantages of digital T1 *****network***** services at a fraction of the cost. The unit economically interconnects LANs, WANs and *****network***** CAD/CAM systems, sets up *****video***** *****teleconferencing*****, and links various mainframes and hosts.

It provides two, four or six independent DTE ports of RS-449, V.35, EIA-530 or DS1; bandwidth selection in any *****multiple***** of 56Kbps or 64Kbps, up to 1.536Mbps; operation in Superframe (D4) or Extended Superframe (ESF) *****networks*****; and selectable internal, external DTE or *****network***** transmit timing.

Front panel control or remote control improves *****network***** efficiency by allowing quick configuration and diagnostic check of *****network***** status.

Digicom Systems Inc., founded in May 1987, develops, manufactures, markets and supports advanced communications...

19/3,KWIC/4 (Item 4 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)

01387239 SUPPLIER NUMBER: 09789729 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Industry trends: the dichotomy of the video age. (digital real-time video on desktop microcomputers may supplant 'mainframe' videoconferencing, but applications and unitary standards are lacking)
Tech Street Journal, v8, n12, p16(5)
Dec, 1990
ISSN: 0889-6461 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 1446 LINE COUNT: 00117

... picture new real-time video applications springing up from today's multimedia applications -- except for *****videoconferencing*****. Where else do you really need to be real-time? So it looks like our two paradigms will clash.

For *****network***** managers, the issues are fairly straightforward:

* Desktop *****videoconferencing***** will drive up bandwidth demand at the desktop level to 56 kbps or 64 kbps ISDN. Maybe more if real-time graphics and voice are part of the *****videoconference*****. LAN bandwidth will also have to go up, as will gateway throughput.

* Broadcast applications will tax *****network***** throughput, LAN and *****network***** storage if store and forward is involved.

* Architectural decisions will have to be made. Should a real-time digital *****video***** *****network***** be overlayed on the backbone data *****network***** or should it be kept *****separate*****? A lot will depend on usage, reliability requirements, and the impact video traffic will have on other transmissions. a lot of companies with imaging *****networks***** today have found it expeditious to keep them *****separate***** from their corporate data *****networks***** -- because large bandwidth image files can crowd out other data traffic.

* What does one do...

...data lines.
* For that matter, what does one do with graphics? Today's meeting room *****videoconferencers***** report that real-time graphics -- at speeds faster than fax -- are practically mandatory. How do they get handled in desktop *****videoconferencing*****?
Quiet resolution
not likely
But the big issue, of course, is how to meld desktop...

19/3,KWIC/5 (Item 5 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)

01380874 SUPPLIER NUMBER: 09617707 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The dichotomy of the video age.
Gantz, John
Networking Management, v8, n11, p46(3)
Nov, 1990
ISSN: 1052-049X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1510 LINE COUNT: 00120

... need to be real-time? So it looks like our two paradigms will clash.
For *****network***** managers, the issues are fairly straightforward. They are as follows:
* Desktop *****videoconferencing***** will drive up bandwidth demand at the desktop level to 56 or 64 kbps ISDN--maybe more if real-time graphics and voice are part of the *****videoconference*****. LAN bandwidth will also have to go up, as will gateway throughput.
* Broadcast applications will tax *****network***** throughput, and LAN and *****network***** storage if store and forward is involved.
* Architectural decisions will have to be made. Should a real-time digital *****video***** *****network***** be overlayed on the backbone data *****network***** or should it be kept *****separate*****? A lot will depend on usage, reliability requirements, and the impact video traffic will have on other transmissions. A lot of companies with imaging *****networks***** today have found it expeditious to keep them *****separate***** from their corporate data *****networks*****, because of how large bandwidth image files can crowd out other data traffic.
* What does...

...data lines.
* For that matter, what does nne do with graphics? Today's meeting room *****videoconferencers***** report that real-time graphics--at speeds faster than facsimile--are practically mandatory. How do they get handled in desktop *****videoconferencing*****?
But the big issue, of course, is how does one interface one's desktop videoconferencing...

19/3,KWIC/6 (Item 6 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)

01380014 SUPPLIER NUMBER: 09614765 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Multimedia: graphics-based computer systems herald future. Multimedia PC likened to combination computer, VCR, compact disc, TV & stereo.
EDGE: Work-Group Computing Report, v1, n25, p5(1)

Nov 12, 1990
LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 930 LINE COUNT: 00079

... compresses and decompresses video and audio signals in industry standard platforms and converts input to *****digital***** *****data***** for processing. This enables PCs to run full-motion video. Intel said this technology will...

...System 7.0, should mark the emergence of true multimedia operating systems.
-- PictureTel discussed its *****multiple*****-site *****teleconferencing***** technology, which features live, full-motion *****video*****. Cowen computer *****networks***** and communications analyst Christopher Mines said the migration of *****video***** communications to desktop computing devices fundamentally will change business communications.
-- Tandy discussed mass-market PCs...

19/3,KWIC/7 (Item 7 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)

01363362 SUPPLIER NUMBER: 08568440 (USE FORMAT 7 OR 9 FOR FULL TEXT)
GE's worldwide network integrates voice, data, video. (GE Telecommunications Network)
Networking Management, v8, n6, p99(2)
June, 1990
ISSN: 1052-049X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1400 LINE COUNT: 00111

... Electric is in the midst of an ambitious plan to expand its U.S. information *****network***** to encompass overseas offices. When the final stage is completed next year, the GE Telecommunications *****Network***** (GETN) is expected to link all of GE's major businesses worldwide through an all-*****digital***** system integrating voice, *****data*****, and video.
A three-phase approach was adopted to link European offices first, Far East facilities next, and finally GE's South American operations. The *****network***** will include two-way *****teleconferencing***** for on-demand *****video*****, and a separate business TV strategy that provides broadcast video for special events and regular...

...result will be a "pre-ISDN" information system, featuring a high degree of customer-controlled *****network***** configuration, high-capacity T1 trunks available in 64-kbps multiples, and on-demand bandwidth reallocation ...

...from GE's far-flung business divisions. At that meeting, a corporate telecom strategy for *****videoconferencing***** was hammered out and various task forces were formed to recommend systems and vendors.
The...

...through T1 lines. Additional nodes are operational in Paris and London. Real-time bandwidth allocations, *****network***** routing, and other management functions are handled by GETN's *****network***** management center in Princeton, N.J.
Regional GE offices usually have access to one T1 circuit or subrates, while larger divisions have access to *****multiple***** T1s.

"What we give, say, GE Medical in Milwaukee is a big bundle of T1...

19/3,KWIC/8 (Item 8 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)

01354234 SUPPLIER NUMBER: 08325258 (USE FORMAT 7 OR 9 FOR FULL TEXT)
PBXs have come a long way, Aunt Dolly. (from human switchboard operators to modern telephone management systems) (Data Lines) (column)
Miles, J.B.
Government Computer News, v9, n7, p19(2)
April 2, 1990
DOCUMENT TYPE: column ISSN: 0738-4300 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 600 LINE COUNT: 00048

... support a broad range of applications for integrated voice and data services, applications portability across *****multiple***** vendors' product lines and software building blocks for developers and end users.
What do these smart PBXs have to do with federal *****network***** planning? A great deal, especially at the agency level. Bob Fiser, spokesman for the General...

...services to be sold by AT&T and Sprint in the form of voice and *****data***** integration, fax transmission, *****video***** *****conferencing*****, etc., will use Integrated Services *****Digital***** *****Network*****.
AT&T and Sprint will take these services to federal agencies over FTS 2000 lines...

19/3,KWIC/9 (Item 9 from file: 275)
DIALOG(R)File 275:IAC(SM) Computer Database(TM)

01100251 SUPPLIER NUMBER: 00613334
Private Network Integrates Data, Voice, and Video Communications.
Phile, W.G.; Green, D.L.; Cole, L.J.
Data Communications, v13, n5, p125-128
May, 1984
ISSN: 0363-6399 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

ABSTRACT: Hercules contracted with Satellite Business Systems in 1980 to develop an integrated voice, *****data*****, and *****video***** *****network*****. Hercules now leases the integrated services *****digital***** *****network***** from SBS. The *****network***** handles computer data, *****videoconferencing*****, and PBX traffic. SBS manages the satellite portion of the *****network*****. Hercules traffic is directed to one of the three SBS satellites in orbit. The *****network***** uses time-division *****multiple***** access to allocate the available bandwidth. Ten earth stations are used in the United States...

...service is provided that handles 2,500 users and 50,000 messages a month. Video *****teleconferencing***** is used from twenty-four specially equipped conferencing rooms. The *****network***** supports over 1,000 terminals, printers, and remote job entry stations. The electronic mail *****network***** handles 4,000 documents per week. Diagrams of the *****network***** and earth station are included.

19/3,KWIC/10 (Item 1 from file: 148)
DIALOG(R)File 148:IAC Trade & Industry Database

06489008 SUPPLIER NUMBER: 14041848 (USE FORMAT 7 OR 9 FOR FULL TEXT)
The missing link. (videoconferencing) (Supplement: Business TV)
Tatge, Paul
Satellite Communications, v17, n5, p5A(1)
May, 1993
ISSN: 0147-7439 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 896 LINE COUNT: 00075

... switcher, video recorder, and graphical interfaces.
On the carrier side, services have emerged to make *****videoconferencing***** more accessible and less expensive. AT&T has introduced a switched 384 kilobit per second...

...switched or digital cross connect Nx56 Kbps services that provide similar access to low-cost *****videoconferencing*****. In addition, Hughes Network Systems offers a VSAT-based *****videoconferencing***** system for two-way, or multiple point conferences with up to 16 sites. Its digital in *****TELEconference***** product offers full-motion video with interactive voice and network control through a graphics-based workstation.
*****Videoconferencing***** is no longer an application exclusive to the Fortune 500. It is now being used...
...more small to medium sized companies across a wider variety of vertical markets and at *****multiple***** corporate locations. It is estimated that more than 500 organizations in the U.S. -- from...

...police departments and government agencies -- have installed on-site systems. Still more organizations use public *****videoconferencing***** facilities such as the Sprint Meeting Channel and the AT&T Skynet *****Videoconferencing***** Service on an as-needed basis. As this use increases, *****videoconferencing***** will evolve from a mere alternative to face-to-face meetings into a means of...

...a progression similar to the evolution of the facsimile machine in the 1980s.
Business TV *****videoconferencing***** growth will come less from new installations and more from the addition of new applications...

...seek support for a broader range of corporate systems. For example, the addition of a *****video***** overlay capability within an existing VSAT corporate *****network***** provides the user with the benefits of better corporate communications, employee training, and new product...

...four primary components: a satellite antenna, outdoor electronics, cabling into the building, and an indoor *****digital***** processing unit that transmits and receives *****data*****. Business TV uses the same antenna, outdoor electronics, and cabling. All that's required to...

19/3,KWIC/11 (Item 2 from file: 148)
DIALOG(R)File 148:IAC Trade & Industry Database

04847946 SUPPLIER NUMBER: 09017808 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Digital videoconferencing in the '90s. (Market Supplement 1990: Business TV and Videoconferencing)

Putney, Fran M.
Satellite Communications, v14, n10, p13A(2)
Nov, 1990
ISSN: 0147-7439 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 1215 LINE COUNT: 00102

... the ability to do multipoint videoconferencing. Multipoint, or "N-way" videoconferencing, is possible in terrestrial *****networks***** through the use of multipoint control units and analog bridges. The former are relatively expensive...

...unique approach to multipoint transmission is being marketed by Hughes Network Systems (HNS). Called in *****TELEconference***** [TM], the HNS system utilizes small earth stations in a full-mesh configuration that supports a number of simultaneous *****videoconferences***** in two-way, N-way, and broadcast modes. Multipoint conferences feature switching of the video...
...on-line reservations commands to the network control earth station.
Users with requirements for interactive *****videoconferencing***** often have requirements for broadcast *****video***** as well. In the past, this usually meant two *****separate***** *****networks*****: one *****video***** *****network*****, usually implemented using terrestrial digital transmission for interactive *****videoconferencing*****, and one *****video***** *****network***** relying on analog satellite broadcasting for "business television." While the in *****TELEconference***** product enables both configurations in a *****digital***** environment, its mid-range *****data***** rate does not offer the full image quality required for some business television applications. Other can be done on digital rather than analog *****channels*****, interesting possibilities begin to emerge for integrating user requirements for interactive *****videoconferencing***** and business television on a single integrated network. Questions of standards remain, of course, as...

19/3,KWIC/12 (Item 3 from file: 148)
DIALOG(R)File 148:IAC Trade & Industry Database

03451738 SUPPLIER NUMBER: 06164804 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Ameritech adds Integrated Digital Network to Business Network.
PR Newswire, 0112NY82
Jan 12, 1988
LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 445 LINE COUNT: 00039

... business customers throughout our region state-of-the-art communications products under the Ameritech Business *****Network***** name."
Other Ameritech Business Network products include:
-- Basic *****Digital***** Service -- a point-to-point *****digital***** *****data***** service offering up to 56 Kilobits-per-second (Kbps) for medium to high speed *****data***** transport.
-- Direct *****Digital***** Service -- a highly reliable, premium *****digital***** service with *****data***** transport speeds up to 56 Kbps and such features as error correction, special central office...

...and specialized maintenance capability.
-- Direct Hi-Cap Service -- a 1.544 Megabits-per-second (Mbps) *****digital***** private line for voice, *****data***** or video that can

be divided into multiple, lower speed channels for uses that include *****video***** *****teleconferencing***** and simultaneous voice and data transmission.

-- Packet Switched *****Network***** -- a packet-switched service that allows economical, high speed transmission of data over shared facilities on either a dial-up or direct connection.

-- Integrated Information *****Network***** -- a central office-based voice and *****data***** *****digital***** communications system with variable high speed *****data***** capability and a variety of sophisticated business communications features.

-- Centrex -- a popular, central office-based...

19/3,KWIC/13 (Item 4 from file: 148)
DIALOG(R)File 148:IAC Trade & Industry Database

01750040 SUPPLIER NUMBER: 02616549 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Telecom is the focus. (Honeywell product mix)
Johnson, Jan
Datamation, v29, p70(5)
Feb, 1983
CODEN: DTMNA LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 2154 LINE COUNT: 00171

... of Honeywell.

While Action/Honeywell's product admitedly has its roots more in voice than *****data*****, the announcement last May of the Roadrunner Digital Edition product expanded Action's capabilites so that it can handle a private voice/data/*****video***** *****network*****. The *****digital***** Roadrunner is an advanced multinode *****network***** switching system for intergrating private voice and data *****networks***** along with two-way, full-motion color video *****teleconferencing*****, electronic mail, message systems, and high-speed facsimile into one common digital *****network*****.

"With Roadrunner Digital Edition, the 1.544Mbps *****channel***** will be as significant to large corporations in the future as Telpak was for them...

...normally required.

The other is with Compression Labs Inc. to market its VTS 1.5 *****teleconference***** signal processing system. According to Action/Honeywell, "The VTS 1.5 system will provide two-way, full-motion color video *****teleconferences***** on only one 1.5Mbps *****channel***** between Roadrunner Digital Edition systems. When not used for color video *****teleconferencing*****, the high-speed *****channel***** can be efficiently used for *****multiple*****-voice conversations and/or data transmission."

But the most interesting ongoing telecommunications effort in Honeywell...

...and SESA-Honeywell. Last May they demonstrated a system for integrating voice and packet switching *****networks***** using the Roadrunner *****Network***** Nanagement System and SESA's DPS 25 distributed packet data switching system.

While Action will...

19/3,KWIC/14 (Item 1 from file: 636)
DIALOG(R)File 636:IAC Newsletter DB(TM)

01788309
FRACTIONAL TI: TAIWAN'S PUBLIC TELEPHONE TELEGRAPH SELECTS DIGICOM SYSTEMS TO PROVIDE FRACTIONAL TI DSU/CSU
EDGE February 01, 1993 V. 8 NO. 236
ISSN: 0890-9563 WORD COUNT: 304
PUBLISHER: Edge Publishing

...We are pleased our technology was selected to support Taiwan's growth in high-speed *****digital***** *****data***** *****network***** communications."

By combining the functions of a *****Data***** Service Unit and *****Channel***** Service Unit into one system, the 5664N FT1 DSU/CSU provides all the advantages of digital T1 *****network***** services at a fraction of the cost. The unit economically interconnects LANs, WANs and *****network***** CAD/CAM systems, sets up *****video***** *****teleconferencing*****, and links various mainframes and hosts.

It provides two, four or six independent DTE ports of RS-449, V.35, EIA-530 or DS1; bandwidth selection in any *****multiple***** of 56Kbps or 64Kbps, up to 1.536Mbps; operation in Superframe (D4) or Extended Superframe (ESF) *****networks*****; and selectable internal, external DTE or *****network***** transmit timing.

Front panel control or remote control improves *****network***** efficiency by allowing quick configuration and diagnostic check of *****network***** status.

Digicom Systems Inc., founded in May 1987, develops, manufactures, markets and supports advanced communications...

19/3,KWIC/15 (Item 2 from file: 636)
DIALOG(R)File 636:IAC Newsletter DB(TM)

01546032
BELLSOUTH, SPRINT JOIN TO TEST DIGITAL SERVICE ON GSA NETWORK
ISDN News July 15, 1992 V. 5 NO. 15
ISSN: 0899-9554 WORD COUNT: 267
PUBLISHER: Phillips Publishing, Inc.

... service. Primary Rate ISDN is a combination of 23 64 Kbps or "B" channels carrying *****digitized***** voice or *****data***** and one 64 Kbps or "D" channel carrying signaling information.

With this arrangement, circuit switched...

... is then passed to Sprint-provided portions of the federal government's FTS 2000 private *****network*****.

Primary Rate ISDN is provisioned for the Sprint-provided portions of the FTS 2000 *****network***** using Extended Super Frame (ESF) and Bipolare 8 Zero Substitution (B8ZS).

GSA's primary objective is to trial a switched *****video***** *****teleconferencing***** application over GSA's local and intercity (FTS 2000) *****network*****. The PRI ISDN is used to carry switched *****videoconferencing***** traffic to other participating locations.

The trial is providing the opportunity to test the feasibility of connecting Digital ESSX service via Primary Rate ISDN to a private *****network*****. This is the first application of this arrangement in the United States.

Bellcore standards for...

... increasing the demand for Basic Rate Interface ISDN. It also will allow the bundling of *****multiple***** DSO *****channels***** for higher bandwidth services such as *****videoconferencing***** . Calling Line Identifications information can also be passed.

...

19/3,KWIC/16 (Item 3 from file: 636)
DIALOG(R)File 636:IAC Newsletter DB(TM)

01253651
Videoconferencing At Texas A&M Network
Educational Marketer October 21, 1991 V. 22 NO. 33
ISSN: 0013-1806 WORD COUNT: 277
PUBLISHER: Simba Information, Inc.

Texas A&M University (College Station, TX) has launched its Interactive Services *****Network***** , which links three locations on campus with a number of other universities around the state...

...Corpus Christi State University and Texas A&I University, among others.

Instructional use of the *****network***** has just recently started, although school officials have been using the system for face-to-face planning sessions and briefings since early this year. The school currently uses *****videoconferencing***** for more than 60 meetings a month. Run by Educational Broadcast Services, the system permits up to 14 different groups to meet with each other simultaneously, and *****multiple***** independent sessions can be held at the same time.

GTE Telephone Operations--Central Area was responsible for system integration and installation of the system's *****digital***** *****video*****/*****data***** *****network***** , and it views the system as a pilot project for other educational institutions. During the *****videoconferences***** made possible by the system, participants can use graphics, overheads, slides, live and recorded broadcast...

19/3,KWIC/17 (Item 4 from file: 636)
DIALOG(R)File 636:IAC Newsletter DB(TM)

01180717
TEXAS A&M INAUGURATES ADVANCED VIDEO NETWORK
Education Computer News July 24, 1991 V. 8 NO. 15
ISSN: 0742-0250 WORD COUNT: 340
PUBLISHER: Business Publishers, Inc.

Texas A&M University has inaugurated an interactive, high-speed data and compressed *****video***** network that encompasses the state of Texas. The Texas A&M Interactive Services Network is...

...sites across the state.

The video portion of the network, known as the Trans-Texas *****Video***** Conferencing *****Network***** , uses the same digital circuits that connect mainframe computers on each of the campuses. Compressed *****digital***** video allows interactive video, audio and data to be transmitted between two or more sites...

...system for regular "face-to-face" planning sessions and briefings. Texas A&M now uses *****videoconferencing***** for more than 60 meetings per month. The system is expected to go into instructional...
... with one another simultaneously, and multiple independent sessions can be held at the same time. "*****Videoconferences***** can be set up quickly, within a matter of minutes, using existing rooms with no...

... Educational Broadcast Services (EBS) at Texas A&M University in College Station, which runs the *****video*****-*****conferencing***** system. The *****network***** connects College Station, Canyon, Laredo, Galveston, Corpus Christi, Dallas, Kingsville, Stephenville, Austin, San Antonio and Prince View. Additional sites are planned.

GTE handled system integration and installation of the *****digital***** *****video*****/*****data***** *****network***** . VideoTelecom Corp. supplied the *****video***** *****conferencing***** systems, and Timeplex provided digital multiplexers. For more information, contact: Ed Abbott, 409/847-9973...

19/3,KWIC/18 (Item 1 from file: 15)
DIALOG(R)File 15:ABI/INFORM(R)

00723850 93-73071
Is Multimedia Ready for Prime Time?
Trowbridge, Dave
Computer Technology Review v12n1 PP: 1, 8-11, 32 Jan 1992
ISSN: 0278-9647 JRNL CODE: CTN
AVAILABILITY: Fulltext online. Photocopy available from ABI/INFORM 15053.00
WORD COUNT: 1654

...TEXT: technology decisions requiring careful thought.

BRINGING NETWORKS UP TO SPEED

The challenges facing integrators in *****network***** technology include bandwidth limitations (both LAN and WAN), synchronization of *****audio***** and video, and cost per station.

Uncompressed NTSC video requires a digital bandwidth of nearly...

...times larger. Both of these exceed the bandwidth of even FDDI.

Fortunately, there are several *****data***** compression techniques that can help. According to *****Digital***** Equipment Corp. (Maynard, MA) JPEG, a single-image standard which can nonetheless be applied to...

... to about 1.5 Mbps. Px64, a very low-bandwidth, low-quality standard designed for *****teleconferencing***** , further reduces bandwidth to as low as 64 Kbps. (See the related article in this issue for more details on video compression techniques.)

This would seem to promise *****multiple***** *****channels***** of video over FDDI. But there are further problems, especially with MPEG. To obtain its...

19/3,KWIC/19 (Item 2 from file: 15)
DIALOG(R)File 15:ABI/INFORM(R)

00710561 93-59782
Comparing TDMA vs. conventional VSAT
Kamal, Sherin S
Telecommunications v27n3 (Americas Edition) PP: 27-32 Mar 1993
ISSN: 0278-4831 JRNL CODE: TEC
AVAILABILITY: Fulltext online. Photocopy available from ABI/INFORM 13068.00
Article Ref. No.: B-TEC-75-11
WORD COUNT: 2065

...TEXT: needs have grown though, increased demand for digital voice, high-speed data, and two-way *****videoconferencing***** has stretched traditional single *****channel***** per carrier/*****multiple***** *****channel***** per carrier (SCPC/MCPC) and demand assigned-frequency division *****multiple***** access (DA-FDMA VSAT technologies to their respective limits. Efforts have resulted in some improvements...

... scale integration and surface mount technology), have made it possible to manufacture compact time division *****multiple***** access (DAMA) VSAT systems that can provide advanced *****digital***** voice, high-speed *****data*****, and two-way *****videoconferencing***** services.
TDMA HISTORY

Understandably, when most of us think of TDMA, we visualize very large...

... such as those used by Intelsat, which are used for trunking hundreds or thousands of *****channels***** . Many believe that TDMA is not a cost-effective method for low-volume voice, data, or *****video***** applications, or for *****networks***** requiring full demand assigned *****multiple***** access (DAMA) interconnectivity. Indeed, in the past, TDMA-based systems were very large and, as...

... full range of voice, data, and video capabilities and are very cost-effective for large *****networks***** . These systems also provide full DAMA and/or pre-assigned operation and can be configured in either star, mesh, broadcast, or combination *****networks*****.

WHY TDMA?

Myths still persist and continue to be perpetuated about TDA VSAT perfonnance and...

19/3,KWIC/20 (Item 3 from file: 15)
DIALOG(R)File 15:ABI/INFORM(R)

00578260 91-52607
Gaining Fees from Voice System
Anonymous
Bank Systems & Technology v28n10 PP: 89-90 Oct 1991
ISSN: 1045-9472 JRNL CODE: BSE
AVAILABILITY: Fulltext online. Photocopy available from ABI/INFORM 7233.01
Article Ref. No.: B-BSE-45-40
WORD COUNT: 1503

...TEXT: CDA/Audio, an extension of its Compound Document Architecture, which allows different applications to share *****audio***** information across a computer *****network*****. Another in-house product is Multiline DECvoice, which combines voice digitization for storage, voice recognition and text-to-speech synthesis into one module.

*****Videoconferencing***** At 2 Mbps

BT North America Inc.'s entry into the *****videoconferencing***** market is being spear-headed by two transmission systems that support the CCITT H.261 standard. The first system, the VC 2100, compresses and *****digitizes***** TV signals for transmission over *****digital***** *****networks*****. The top *****data*****-transmission speed the system has is 2 Mbps, and it also has full duplex open...

'... allows interactive conversation to take place. The second model, the VC 2200, enables dial-up *****videoconferencing***** to occur at 113 kbps, and it can be connected to both public and private digital switched *****networks***** . In addition to sending real-time moving pictures, the system can also be used for transmitting documents.

ISDN Telephone Sat

Fujitsu *****Network***** Switching of America Inc. has a phone set, the SRS-1050, that operates on the...

... s 5ESS central office switch. Fujitsu said it plans to upgrade the system to support *****multiple***** central office switches. Support for the V.120 rate adaptation standard is

19/3,KWIC/21 (Item 4 from file: 15)
DIALOG(R)File 15:ABI/INFORM(R)

00183681 82-25242
Video Teleconferencing - Beyond the Gimmicks
Anonymous
Telecommunications v16n9 PP: 27 Aug 1982
ISSN: 0040-2494 JRNL CODE: TEC
AVAILABILITY: Photocopy available from ABI/INFORM 13068.00

ABSTRACT: A Video *****Teleconferencing***** Service (VTS) has been introduced by American Satellite Co. (Rockville, Maryland); it combines the cost...

... and high quality of digital transmission with the flexibility and affordability of a variety of *****teleconferencing***** room options. VTS provides: 1. end-to-end, interactive private *****network***** *****video***** *****teleconferencing***** using digital compression technology, 2. satellite *****channels***** , 3. earth stations, 4.

customized *****teleconferencing***** rooms or portable consoles, and 5. graphic consoles for remote viewing of hard copy and...

... This system makes possible the transmission of video, voice, and facsimile on a single digitized *****channel***** divided by multiplexing techniques. Facsimile can be integrated into the system as an audio signal and fed through a *****separate***** audio *****channel*****, or a modem can be used so that facsimile can be fed as *****digital***** *****data***** alternating between voice and facsimile *****channel***** use. This system provides for the future addition of other sites, as well as alternative...

19/3,KWIC/22 (Item 1 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

04489007
Telecom gear enters real growth era

Electronic Buyers' News May 31, 1993 p. M26
ISSN: 0164-6362
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 1348

BY LORING WIRBEL
If 1992 was the year new telecommunications and local-area-*****network***** technologies were proposed, 1993 will be the year that many of these technologies emerge for...

...technology competes for the same user base.
Two areas promise especially feverish activity. One is *****digital***** cellular telecom, which will see new voice and *****data***** systems; the other encompasses LANs that are faster than 100 Mbits/second, where Fiber Distributed Data Interface, private Asynchronous Transfer Mode and fast Ethernet offerings will compete.
'Fast *****network***** providers should pin their hopes on data and still image users, not PC-based *****videoconferencing*****. There are at least six transmission schemes pending for *****video***** *****networks*****, and the software to support this will not be around for at least two to...

... that voice-only analog cellular nets have reached the end of their usefulness. Time-division *****multiple*****-access digital phone systems are being shipped to service providers now; they are being challenged by code-division *****multiple*****-access, an alternative multiplexing scheme promoted by Qualcomm Inc. (San Diego) and its partner, Oki...

19/3,KWIC/23 (Item 2 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

04482140
Video Conferencing: Treasure Chest or Pandora's Box?

Telephone Engineer & Management June 15, 1993 p. 40
ISSN: 0040-263X
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 1259

...exchange and changing trunk capacity. These actions can have unknown

repercussions. For some companies, this *****network***** tinkering means a video conference call made one day cannot be made the next. In...

...it really means carriers point fingers at each other.

Unless IXCs and LECs address video *****conferencing***** implementation and operational issues, competitors will take advantage of their apathy.

As *****video***** *****conferencing***** use expands, it can become a valuable communication tool. But tapping into this resource won't be easy. Equipment incompatibility and lack of *****network***** integration are concerns. The last thing customers need is a bottleneck at the IXC or LEC.

Table 1: *****Video***** *****conferencing***** revenue growth, 1989-92 and 1993-95 estimated; Table 2: user profile based on percentage using different transmission speeds.

*****Video***** *****Conferencing***** Growth

	Revenues ($ mil)
1989	180
1990	270
1991	460
1992	800
1993 (est.)	1,280...

...Profile: Transmission Speed

112 kbps	39.7%
384 kbps	11.8
768 kbps+	8.8
*****Multiple***** speeds	39.7

...

19/3,KWIC/24 (Item 3 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

03791400
SPAR INSTALLS FIRST VSATPLUS NETWORK; GRUPO ICA SYSTEM TO COVER 33 LOCATIONS, SPAN MEXICO

News Release March 5, 1992 p. 1

Spar Communications Group announces receipt of a contract to build its first VSATPlus *****network***** , with the award of $3.6 million for a 33-site system for Grupo ICA, Latin America's largest construction engineering firm. The Grupo ICA *****network*****, designed to carry a variety of voice, data, facsimile and video communication services throughout Mexico...

...major use of this hubless VSAT product, unveiled by Spar late last year. The Spar *****network***** provides a "total communications solution" for Grupo ICA's complex retirements. These include full mesh high quality voice, low and high speed datayand on-demand two-way *****video***** *****conferencing***** supported over *****multiple***** virtual *****network***** topologies. Many of the sites in the new *****network***** are in remote or rural locations and presently have no communication service. The *****network***** features the light-weight, compact Spar VSATPlus satellite communication terminals, with full mesh hubless operation for digital voice, data transmission up to TIlE] speeds and two-way *****video***** *****conferencing***** . With Spar's unique

"Service on Demand" feature, communications services are allocated as needed, scheduled or unscheduled. VASTPlus is the world's only hubless VSAT product available today. The *****network***** will be controlled from Mexico City, spanning the county and extending to sites as far...

... projects, such as pipelines, cablelines and highways. Grupo ICA has plans for a hemispheric-wide *****network***** expansion to support operations throughout North and South America.
...

19/3,KWIC/25 (Item 4 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

03456443
The network in 2001: High-speed networking will transform the nature of computing

Electronic Engineering Times November 4, 1991 p. 78
ISSN: 0192-1541
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 1294

... The rapidly declining cost of FDDI chip sets and components, combined with the increase in *****network***** traffic, is driving FDDI to the desktop.

Installing a faster *****network***** like FDDI can speed up file transfers, but the real solution to the voice and video server challenge is to allow playback over the *****network***** . The interface should be implemented so that the source of the information is transparent to...

...from a VCR plugged into the back of the computer from data received over the *****network*****. Receiving data over the *****network***** also has the advantage of allowing *****multiple***** users to observe the playback simultaneously. This type of service will be a boon to...
... return path is an inefficiency. In addition, the receive and transmit buffers required for video *****teleconferencing***** over FDDI are large.

The need to reliably transfer real-time multimedia over a large *****network***** has stimulated the development of FDDI-II. Working together, the leading FDDI players have approved...

... data at programmable data rates. Thus, FDDI-II provides for hybrid traffic: packet switching for *****digital***** *****data***** and circuit switching for the *****data*****-intensive voice and video transfers.

Isochronous bandwidth can be allocated in increments as small as...

... Isochronous service simplifies the interface for synchronized service like video playback, or real-time video *****teleconferencing*****. For example, in the case of *****video***** playback over the *****network***** , the transfer would require about 1.5 Mbits/s (depending on the screen size, compression...

... initializing the connection, a 1.5-Mbit/s isochronous channel would be established.

As the *****video***** plays back over the *****network*****, the receiving station would demultiplex the data from the FDDI-II network, decompress the data...

19/3,KWIC/26 (Item 5 from file: 16)

DIALOG(R)File 16:IAC PROMT(R)

03391186
Texas video gets compressed for T1 transmission
Texas A & M uses T1 network for video, conferences, TX

Communications News October, 1991 p. 50
ISSN: 0010-3632
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 230

...Antonio, and other campus sites. Still more sites are to be added to the T1 *****network*****.
"Many people have dreamed about creating the kind of system we have in place today...

... John J. Dinkel, associate provost for computing and information systems at Texas A&M.
The *****network***** uses compressed *****digital***** *****video***** to allow interactive *****video*****, *****audio*****, and *****data***** to be transmitted between two or more sites using T1 circuits.
"Although the video information...

...the university.
As many as 14 different groups can meet with each other simultaneously, or *****multiple***** independent sessions can be held at the same time, using a multipoint switch. University administrators say the biggest benefits are in reduced travel costs and savings of executives' time.
The *****video***** portion of the *****network***** uses the same circuits connecting mainframe computers on each campus.
Texas A&M uses VideoTelecom *****videoconferencing***** systems and Timeplex multiplexers. GTE Telephone Operations was responsible for system integration. ...

19/3,KWIC/27 (Item 6 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)
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03063430
VIDEO IMAGES ENHANCE PC's POWER

Electronic Engineering Times March 28, 1991 p. 8
ISSN: 0192-1541
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 1881

... processors (VSPs) with considerable systems-design experience to achieve complete solutions to new customer applications.
*****Video*****-*****conferencing***** systems (VCSs) incorporate video- and audio-compressor technology for two-way real-time *****video***** communications over low-*****data*****-rate switched *****digital***** *****networks***** . They also include acoustic echo cancellation, for hands-free *****audio*****; cameras mounted on pan/tilt mechanisms; and numerous optional display and input devices.
In the...

... that will bring video-communications capabilities to a wide array of personal systems by 1992.
*****Video*****-*****conferencing***** users are already reaping benefits. For example, McDonnell Douglas engineers at two

*****separate***** locations--in St. Louis and California--developed a fighter jet and flight tested it in...

19/3,KWIC/28 (Item 7 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

02629879
Coastal Conferencing

CommunicationsWeek June 25, 1990 p. 14
ISSN: 0746-8121
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 530

... T1 lines connecting eight domestic locations and four fractional T1 lines linking international sites. Dataphone *****Digital***** Services are used for wide area data *****network***** . connections. Bandwidth is allocated using Newbridge *****Networks***** Corp.'s 3600 multiplexers. The company manages the *****network***** with SunNet manager, Sun's *****network***** management system and Newbridge 4602 *****network***** management software. For voice communications, Sun uses AT&T System 75 and System 85 PBXs...

...work groups were traveling continually, using audio teleconferencing and expanding the bandwidth of its data *****network***** for electronic mail to design new products. They decided videoconferencing could solve the problem of working on opposite coasts.

They turned to Sun's *****Network***** Group, which conducted extensive tests in the company's *****network***** lab of *****videoconferencing***** systems made by U.S. vendors to find equipment that best suited their requirements. The...

... San Jose, Calif., PictureTel Corp., Peabody, Mass., and VideoTelecom Corp., Austin, Texas.

Evaluations of several *****videoconferencing***** systems were made to determine what vendor, what equipment, what features and what interfaces would be best for Sun. The expectation was that the company's use of *****videoconferencing***** would expand in the future.

SOLUTION: Four *****videoconferencing***** systems from PictureTel Corp. were installed. They offered the necessary video quality and worked well with *****multiple***** 56- kilobit-per-second circuits, promoting flexibility and cost-saving. The PictureTel systems also let Sun meet its objective of handling full-motion video over its PBX *****network***** and dial-up services.

Currently, the *****videoconferencing***** systems are used 40 to 50 hours a week, by technical teams that exchange information...

...kbps slices of band-width from Sun's T1 and T3 lines are used for *****videoconferencing***** . There is a digital cross connection between two conference rooms used about 10 hours a...

19/3,KWIC/29 (Item 8 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

02097054
ARTEL ANNOUNCES PLANS FOR TRANSPORTATION AND DISTRIBUTION OF T1 OVER FiberWay (R)

News Release October 31, 1988 p. 1

... the telecommunications and data communication requirements of Artel's customers integrated into a single redundant *****network*****. FiberWay (R) is the first 100 Mbps fiber optic digital multi- service *****network***** capable of handling today's and tomorrow's demanding communications needs. FiberWay (R)'s time-division multiplexing access (TDMA) architecture allows simultaneous support of *****multiple***** communications services over four *****distinct***** 25 Mbps bands. Each band operates independently and can carry different kinds of information. FiberWay (R)'s ring topology permits an orderly migration of the *****network***** adding services such as *****digitized***** voice, *****data***** and *****teleconferencing***** *****video***** as required. The NetServer *****network***** management software provides sophisticated backbone *****network***** management capabilities for all FiberWay (R) products. ...

19/3,KWIC/30 (Item 9 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

01979901
VideoTelecom (TM) Corp. Introduces Industry's Most Affordable, Full-Featured Long-Distance Conference Systems

News Release August 4, 1988 p. 1

... products, VideoTelecom today introduced two new low- cost video devicem that offer full-motiuon interactive *****video***** over digital long-sdistance *****networks*****. The *****video***** systems feature a PC-based, open-architecture design and state-of-the-art VLSI processors...

... improvements occurring in the computer industry. The new Conference Systems 200 ad 300 offer remote *****videoconferencing***** capabilities, with the Conference System 300 adding and IBM (R) -AT (R) -compatible PC for...

... codec, designed by VideoTelecom, with a user-selectable 56K to 768K bit per second (bps) *****data***** rate. The codec consists of expansion boards containing *****multiple***** *****digital***** signal processing chips. The Conference Systems 200 and 300 also include another VideoTelecom design accomplishment...

19/3,KWIC/31 (Item 10 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

00965091
Pacific Telephone & Telegraph may build a 422-mi fiber-optic interactive CATV network in Palo Alto, CA.

MIS Week November 9, 1983 p. 23

In addition to conventional CATV programming, the $17 million *****network***** would offer such services as *****teleconferencing***** and computer-to-computer messaging. All communications would be transmitted as laser-generated pulses of...

... cable used with standard metallic cables. A 2nd component of the system would be a *****separate*****, all fiber-optic *****digital***** *****network***** for high-speed *****data***** and full-motion *****video***** services to concentrated business areas. Pending approval, completion: mid-1985.
...

19/3,KWIC/32 (Item 11 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

00946038
Interactive cable TV is the most promising new bypass technology because it offers high transmission capacity for delivery of digitized data, video and voice, according to R Millington, TeleStrategies (McLean, VA).

Telephone Engineer & Management May 1, 1983 p. 53,541

Some urban cable systems are constructing *****separate***** institutional cable *****networks***** for 2-way *****digital***** transmission for services such as *****video***** *****conferencing*****, mainframe computer *****data***** transfer, electronic mail, facsimile, voice, computerized traffic light systems, utility peak load management and other applications. Cable's main advantage is that the same transmission line can be reused by *****multiple***** users, who share the cost; thus, rates become lower as more users are added to the *****network*****. Cable can also be used for delivery of upcoming interactive home servicesP For businesses, 2...

... over telephone lines: immediately available space, more flexibility, better reliability and lower costs. However, such *****networks***** face several problems: there are very few 2-way systems in operation, and rural markets...

19/3,KWIC/33 (Item 1 from file: 772)
DIALOG(R)File 772:Textline Global News

10092344
USA: TAIWAN'S PUBLIC TELEPHONE TELEGRAPH SELECTS DIGICOM SYSTEMS TO PROVIDE FRACTIONAL TI DSU/CSU
Businesswire (BUSW) - January 25, 1993
Word Count: 333

...We are pleased our technology was selected to support Taiwan's growth in high-speed *****digital***** *****data***** *****network***** communications."

By combining the functions of a *****Data***** Service Unit and *****Channel***** Service Unit into one system, the 5664N FT1 DSU/CSU provides all the advantages of digital T1 *****network***** services at a fraction of the cost. The unit economically interconnects LANs, WANs and *****network***** CAD/CAM systems, sets up *****video***** *****teleconferencing*****, and links various mainframes and hosts.

It provides two, four or six independent DTE ports of RS-449, V.35, EIA-530 or DS1; bandwidth selection in any *****multiple***** of 56Kbps or

... cable used with standard metallic cables. A 2nd component of the system would be a *****separate*****, all fiber-optic *****digital***** *****network***** for high-speed *****data***** and full-motion *****video***** services to concentrated business areas. Pending approval, completion: mid-1985.
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It provides two, four or six independent DTE ports of RS-449, V.35, EIA-530 or DS1; bandwidth selection in any *****multiple***** of 56Kbps or

64Kbps, up to 1.536Mbps; operation in Superframe (D4) or Extended Superframe (ESF) *****networks*****; and selectable internal, external DTE or *****network***** transmit timing.

Front panel control or remote control improves *****network***** efficiency by allowing quick configuration and diagnostic check of *****network***** status.

Digicom Systems Inc., founded in May 1987, develops, manufactures, markets and supports advanced communications...

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File 275:IAC(SM) Computer Database(TM) 1983-1996/Oct 28
         (c) 1996 Info Access Co
File 148:IAC Trade & Industry Database 1976-1996/Oct 28
         (c) 1996 Info Access Co
File 674:Computer News Fulltext 1989-1996/Oct W3
         (c) 1996 IDG Communications
File 122:Harvard Business Review 1971-1996/Oct
         (c) 1996 Harvard Business Review
File 625:American Banker Publications 1981-1996/Oct 25
         (c) 1996 American Banker
File 735:St. Petersburg Times 1989- 1996/Oct 25
         (c) 1996 St. Petersburg Times
File 624:McGraw-Hill Pubs 1985-1996/Oct 25
         (c) 1996 McGraw-Hill Companies Inc
File 623:Business Week 1985-1996/Oct W3
         (c) 1996 The McGraw-Hill Companies Inc
File 746:Time Publications 1985-1996/Oct 23
         (c) 1996 Time Inc.
File 646:Consumer Reports 1982-1996/Oct
         (c) 1996 Consumer Union
File 239:MathSci(R) 1940-1996/Nov
         (c) 1996 American Mathematical Society
File  88:IAC BUSINESS A.R.T.S. 1976-1996/Oct
         (c) 1996 Information Access Co.
File 636:IAC Newsletter DB(TM) 1987-1996/Oct 28
         (c) 1996 Information Access Co.
File   9:Business & Industry(R) Jul 1994-1996/Oct 28
         (c) 1996 Resp. DB Svcs.
File  12:IAC Industry Express (sm) 1995-1996/Oct 28
         (c) 1996 Info. Access Co.
File  15:ABI/INFORM(R) 1971-1996/Oct W4
         (c) 1996 UMI
File  16:IAC PROMT(R) 1972-1996/Oct 28
         (c) 1996 Information Access Co.
File  18:IAC F&S INDEX(R) 1980-1996/Week 2
         (c) 1996 Information Access Co.
File  47:Magazine Database(TM) 1959-1996/Oct 28
         (c) 1996 INFORMATION ACCESS CO.
File  75:IAC Management Contents(R) 86-1996/Oct W3
         (c) 1996 Info Access Co
File 484:Periodical Abstracts Plustext 1986-1996/Oct W3
         (c) 1996 UMI
File 799:Textline Curr.Glob.News 1995-1996/Oct 27
         (c) 1996 Reuters Info.Svcs.
File 772:Textline Global News 1990-1994
         (c) 1996 Reuters Info.Svcs.
File 771:Textline Global News 1980-1989
         (c) 1994 Reuters Info.Svcs.
File 262:Canadian Bus. & Current Affairs 1982-1996/Sep
         (c) 1996 Micromedia Ltd.
File 621:IAC New Prod.Annou.(R) 1985-1996/Oct 28
         (c) 1996 Information Access Co

Set      Items   Description
S1      102446   (TELE OR VIDEO OR TELEVIDEO OR VIDEOTELE)()CONFERENCING OR
              TELECONFERENC? OR VIDEOCONFERENC? OR TELEVIDEOCONFERENC? OR V-
              IDEOTELECONFERENC?
S2       40958   S1 NOT (PY=1994:1996 OR PY=930930:961025 OR PD=930930:9610-
              25)
S3          28   S2(100N)(VIDEO()VOICE()DATA OR LVX OR LOCAL()VIDEO()EXCHAN-
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            G?)
S4          99   S2(100N)((TRANSMIT? OR TRANSMISSION? OR BROADCAST?)(20N)(P-
               AL OR PHASE(2W)LINE? ? OR NTSC OR NATIONAL()TELEVISION()SYSTE-
               M))
S5        1930   S2(100N)(SEPARATE OR MULTIPLE OR DISTINCT)(5N)(NETWORK? ? -
               OR CHANNEL?)
S6         464   S2(100N)((DATA(N10)(DIGITAL OR DIGITIS? OR DIGITIZ?))(100N)
                 (NETWORK?(N10)(AUDIO OR VIDEO)))
S7           0   S3(100N)S4(100N)S6(100N) S7
S8           0   S3(100N)S4(100N)S6
S9           0   S3(N100)S4(N100)S5(N100)S6
S10          0   S3(N100)S4(N100)S5
S11          0   S3(N100)S4(N100)S6
S12          0   S3(N100)S5(N100)S6
S13          0   S4(N100)S5(N100)S6
S14          4   S3(N100)(S4 OR S5 OR S6)
S15          9   (S4(N100)(S5 OR S6)) NOT S14
S16         47   (S5(N100)S6) NOT (S14 OR S15)
S17          2   RD S14 (unique items)
S18          7   RD S15 (unique items)
S19         33   RD S16 (unique items)
S20         24   S3 NOT (S14 OR S15 OR S16)
S21         17   RD S20 (unique items)
S22         90   S4 NOT (S14 OR S15 OR S16 OR S20)
S23         72   RD S22 (unique items)
S24       1871   S5 NOT (S14 OR S15 OR S16 OR S20 OR S22)
S25        394   S6 NOT (S14 OR S15 OR S16 OR S20 OR S22 OR S24)
```

*****separate***** locations--in St. Louis and California--developed a fighter jet and flight tested it in...

19/3,KWIC/28 (Item 7 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

02629879
Coastal Conferencing

CommunicationsWeek June 25, 1990 p. 14
ISSN: 0746-8121
FULL TEXT AVAILABLE IN FORMAT 7 OR 9 WORD COUNT: 530

... T1 lines connecting eight domestic locations and four fractional T1 lines linking international sites. Dataphone *****Digital***** Services are used for wide area data *****network***** . connections. Bandwidth is allocated using Newbridge *****Networks***** Corp.'s 3600 multiplexers. The company manages the *****network***** with SunNet manager, Sun's *****network***** management system and Newbridge 4602 *****network***** management software. For voice communications, Sun uses AT&T System 75 and System 85 PBXs...

...work groups were traveling continually, using audio teleconferencing and expanding the bandwidth of its data *****network***** for electronic mail to design new products. They decided videoconferencing could solve the problem of working on opposite coasts.

They turned to Sun's *****Network***** Group, which conducted extensive tests in the company's *****network***** lab of *****videoconferencing***** systems made by U.S. vendors to find equipment that best suited their requirements. The...

... San Jose, Calif., PictureTel Corp., Peabody, Mass., and VideoTelecom Corp., Austin, Texas.

Evaluations of several *****videoconferencing***** systems were made to determine what vendor, what equipment, what features and what interfaces would be best for Sun. The expectation was that the company's use of *****videoconferencing***** would expand in the future.

SOLUTION: Four *****videoconferencing***** systems from PictureTel Corp. were installed. They offered the necessary video quality and worked well with *****multiple***** 56- kilobit-per-second circuits, promoting flexibility and cost-saving. The PictureTel systems also let Sun meet its objective of handling full-motion video over its PBX *****network***** and dial-up services.

Currently, the *****videoconferencing***** systems are used 40 to 50 hours a week, by technical teams that exchange information...

...kbps slices of band-width from Sun's T1 and T3 lines are used for *****videoconferencing***** . There is a digital cross connection between two conference rooms used about 10 hours a...

19/3,KWIC/29 (Item 8 from file: 16)
DIALOG(R)File 16:IAC PROMT(R)

02097054
ARTEL ANNOUNCES PLANS FOR TRANSPORTATION AND DISTRIBUTION OF T1 OVER FiberWay (R)

File 351:DERWENT WPI 1981-1996/UD=9642;UA=9638;UM=9631
(c)1996 Derwent Info Ltd
File 350:Derwent World Pat. 1963-1980/UD=9640
(c) 1996 Derwent Info Ltd
File 348:EUROPEAN PATENTS 1978-1996/OCT W4
(c) 1996 European Patent Office
File 347:JAPIO OCT 1976-1996/May.
(c) JPO & JAPIO
File 344:Chinese Patents ABS Apr 1985-1996/Oct
(c) 1996 European Patent Office

Set	Items	Description
S1	4	AN="US 660460"

1/3,AN/1 (Item 1 from file: 351)
DIALOG(R)File 351:DERWENT WPI
(c)1996 Derwent Info Ltd. All rts. reserv.

008945027 WPI Acc No: 92-072296/09
XRPX Acc No: N92-054287
Motor driving appts. for printer - has processor which outputs selection signals which are multiplexed through frequency response switches to select one of several motors
Patent Assignee: (IBMC) INT BUSINESS MACHINES CORP; (IBMC) IBM CORP
Author (Inventor): KRUPPA R W; KRUPPA B W
Patent Family:

CC	Number	Kind	Date	Week	
US	5087867	A	920211	9209	(Basic)
EP	501902	A2	920902	9236	
JP	4275099	A	920930	9246	
EP	501902	A3	930127	9347	

Priority Data (CC No Date): US 660460 (910225)
Applications (CC,No,Date): EP 92480012 (920128); EP 92480012 (920128); JP 91325161 (911113)

1/3,AN/2 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent World Pat.
(c) 1996 Derwent Info Ltd. All rts. reserv.

000701791 WPI Acc No: 70-38893R/22
XRAM Acc No: C70-R38893
Weather strip with springy plastic arm
Patent Assignee: (SCLM) SCHLEGEL MANUFACTURING CO
Patent Family:

CC	Number	Kind	Date	Week	
GB	1193737	A	000000	7022	(Basic)
FR	1584379	A	000000	7024	

Priority Data (CC No Date): US 660460 (670814)

1/3,AN/3 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 1996 European Patent Office. All rts. reserv.

00551258
Motor driving apparatus for printer.
PATENT ASSIGNEE:
International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

AUTHOR (Inventor):
Kruppa, Robert William, 203 Ronaldsby Drive, Cary, NC 27511, (US)
LEGAL REPRESENTATIVE:
de Pena, Alain (15151), Compagnie IBM France Departement de Propriete Intellectuelle, F-06610 La Gaude, (FR)
PATENT (CC, No, Kind, Date): EP 501902 A2 920902 (Basic)
EP 501902 A3 930127
APPLICATION (CC, No, Date): EP 92480012 920128;
PRIORITY DATA (CC, No, Date): US 660460 910225
LANGUAGE (Publication,Procedural,Application): English; English; English
DESIGNATED STATES: DE; FR; GB
INTL PAT CLASS: H02P-008/00;
WORD COUNT: 95

1/3,AN/4 (Item 1 from file: 347)
DIALOG(R)File 347:JAPIO

03909999
CONTROLLER FOR DRIVING MOTOR AND CIRCUIT ARRAY

PUB. NO.: 04-275099 [JP 4275099 A]
PUBLISHED: September 30, 1992 (19920930)
INVENTOR(s): ROBAATO UIRIAMU KURUTSUPA
APPLICANT(s): INTERNATL BUSINESS MACH CORP <IBM> [000709] (A Non-Japanese Company or Corporation), US (United States of America)
APPL. NO.: 03-325161 [JP 91325161]
FILED: November 13, 1991 (19911113)
PRIORITY: 7-660,460 [US 660460-1991], US (United States of America), February 25, 1991 (19910225)

File 351:DERWENT WPI 1981-1996/UD=9642;UA=9638;UM=9631
(c)1996 Derwent Info Ltd
File 350:Derwent World Pat. 1963-1980/UD=9640
(c) 1996 Derwent Info Ltd
File 348:EUROPEAN PATENTS 1978-1996/OCT W4
(c) 1996 European Patent Office
File 347:JAPIO OCT 1976-1996/May.
(c) JPO & JAPIO
File 344:Chinese Patents ABS Apr 1985-1996/Oct
(c) 1996 European Patent Office

Set	Items	Description
S1	90	AU=CRAWFORD C?
S2	4	AU=MILONE F?
S3	0	AU=ZOPPELLARO D?
S4	0	S1 AND S2

File 434:Scisearch(R) Cited Ref Sci 1974-1996/Oct W2
(c) 1996 Inst for Sci Info
File 7:Social SciSearch(R) 1972-1996/Oct W3
(c) 1996 Inst for Sci Info
File 439:Arts&Humanities Search(R) 1980-1996/Oct W3
(c) 1996 Inst for Sci Info

Set	Items	Description
S1	92	CR=CRAWFORD C, 1988, ?
S2	0	S1 AND (VIDEO OR TELEVIDEO OR TELECONFEREN? OR LVX OR VOIC-E()DATA)
S3	0	CR=MILONE F, 1988?
S4	0	CR=ZOPPELLARO D, 1988?

File 342:Derwent Patents Citation Indx 1978-96/96C41
(c) 1996 Derwent Info Ltd

Set	Items	Description
S1	375	RF=CRAWFORD
S2	2	RF=MILONE
S3	0	RF=ZOPPELLARO
S4	0	S1(N20)S2
S5	0	S1 AND S2

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File 275:IAC(SM) Computer Database(TM) 1983-1996/Oct 25
         (c) 1996 Info Access Co
File 148:IAC Trade & Industry Database 1976-1996/Oct 25
         (c) 1996 Info Access Co
File 674:Computer News Fulltext 1989-1996/Oct W2
         (c) 1996 IDG Communications
File 745:Fortune Magazine(r) 1985-1996/Oct 01
         (c) 1996 Time Inc.
File 624:McGraw-Hill Pubs 1985-1996/Oct 22
         (c) 1996 McGraw-Hill Companies Inc
File 623:Business Week 1985-1996/Oct W3
         (c) 1996 The McGraw-Hill Companies Inc
File 122:Harvard Business Review 1971-1996/Oct
         (c) 1996 Harvard Business Review
File 625:American Banker Publications 1981-1996/Oct 24
         (c) 1996 American Banker
File 746:Time Publications 1985-1996/Oct 23
         (c) 1996 Time Inc.
File 646:Consumer Reports 1982-1996/Oct
         (c) 1996 Consumer Union
File 799:Textline Curr.Glob.News 1995-1996/Oct 25
         (c) 1996 Reuters Info.Svcs.
File 772:Textline Global News 1990-1994
         (c) 1996 Reuters Info.Svcs.
File 771:Textline Global News 1980-1989
         (c) 1994 Reuters Info.Svcs.
File  47:Magazine Database(TM) 1959-1996/Oct 25
         (c) 1996 INFORMATION ACCESS CO.
File  75:IAC Management Contents(R) 86-1996/Oct W2
         (c) 1996 Info  Access Co
File  88:IAC BUSINESS A.R.T.S. 1976-1996/Oct
         (c) 1996 Information Access Co.
File 636:IAC Newsletter DB(TM) 1987-1996/Oct 25
         (c) 1996 Information Access Co.
File   9:Business & Industry(R) Jul 1994-1996/Oct 25
         (c) 1996 Resp. DB Svcs.
File  12:IAC Industry Express (sm) 1995-1996/Oct 25
         (c) 1996 Info. Access Co.
File  15:ABI/INFORM(R) 1971-1996/Oct W4
         (c) 1996 UMI
File  16:IAC PROMT(R) 1972-1996/Oct 25
         (c) 1996 Information Access Co.
File  18:IAC F&S INDEX(R) 1980-1996/Week 1
         (c) 1996 Information Access Co.
File  35:Dissertation Abstracts Online1861-1996/Oct
         (c) 1996 UMI
File 239:MathSci(R) 1940-1996/Nov
         (c) 1996 American Mathematical Society
File 635:Business Dateline(R) 1985-1996/Oct W4
         (c) 1996 UMI
File 262:Canadian Bus. & Current Affairs 1982-1996/Sep
         (c) 1996 Micromedia Ltd.

Set      Items   Description
S1       42428   CRAWFORD
S2         213   MILONE
S3           0   ZOPPELLARO
S4           0   CRAWFORD(N20)MILONE(N20)ZOPPELLARO
S5           0   CRAWFORD(N20)MILONE
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